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An Undescribed Early Christian Ivory Diptych

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THE Early Christian ivory diptych which, by the permission of the owner, Mr. Andrews, it is my privilege to bring before the Society is almost entirely unknown. I have called it 'undescribed', and I might almost have called it 'unpublished'. But some twenty years ago a rather inadequate photographic reproduction of it did appear in the first volume of Professor Venturi's invaluable *Storia dell' Arte Italiana*.¹ Since that date a number of archaeologists have tried to get a sight of the diptych, but in vain. And the few brief notices of it that have been published by Professor Goldschmidt, Dom Leclercq, and others, have been based entirely on the small and not very clear half-tone block given without comment by Professor Venturi.

It is probably unnecessary to insist on the extreme rarity of Early Christian ivory diptychs. Of actual complete diptychs with Christian subjects dating before the Carolingian revival there are hardly more than about half a dozen; and of separate single leaves about half as many. Every one of these has been repeatedly illustrated and described and discussed from every point of view. I am sure, therefore, that you will agree with me in feeling that the owner of this most interesting and important work of art has conferred a real privilege on us in allowing us to examine it here in this way for the first time.

It was illustrated, as I have said, by Professor Venturi in 1901 in his *Storia*, and the only reference to it in the text is the state-

¹ Vol. I (1901), p. 417, fig. 382, and p. 505.

ment that it was in the cathedral of Palermo. Professor Venturi has very kindly supplied me with some particulars as to the circumstances under which he saw it and obtained a photograph. It was shown to him some time towards the end of the last century in the cathedral of Palermo by a young canon, who left him to understand that it was cathedral property; and the same canon afterwards sent him the photograph. The diptych appears in fact to have been the canon's own property, but as Professor Venturi was at that time Inspector-General of Fine Arts, the owner was no doubt afraid that if it were known to be in private hands the ivory would be classed as of national importance, so as to hinder its sale out of the country.

The diptych then disappeared for some five and twenty years. It was referred to by Dr. Goldschmidt in an article¹ with the comment that it was difficult to decide from the reproduction whether it was of Early Christian or Carolingian date; it is also referred to in Mr. Dalton's *Byzantine Art and Archaeology*,² and it is included in the list of diptychs in Dom Leclercq's article³ on the subject, always on the assumption that it was hidden somewhere in Palermo Cathedral. But its next actual appearance was at the sale of the late Mr. D. M. Currie's collection on the 9th of February last year (1921) at Christie's.

Mr. Currie had bequeathed the bulk of his collection, which was already on loan at South Kensington, to the Victoria and Albert Museum, where it is now permanently exhibited. But this ivory had unfortunately never been included in the loan. I have met nobody who had seen or heard of it, and I can only suppose that it was regarded by its late owner as of small importance or (what is perhaps more likely) that he was under an obligation to the vendor not to show it. At Christie's it was looked at with suspicion and catalogued (no. 86) as 'in the style of the Tenth Century'—an ominous phrase! Most of the dealers present regarded it as a forgery, so it was purchased for a relatively small sum by my friend Mr. F. E. Andrews of Cardiff, who has been kind enough to deposit it on loan at the Victoria and Albert Museum.

It seems unlikely that any further details as to the manner in which the diptych left Palermo and came into the late Mr. Currie's hands will ever be discovered.

¹ *Jahrbuch der preussischen Kunstsammlungen*, xxvi (1905), p. 64, nos. 23-24. p. 192.

² *Dictionnaire d'archéologie chrétienne*, s. v. *Diptychs*, no. 71, col. 1154. Other casual references are in Reil, *Altchristliche Bildzyklen* (1910), p. 46, in Baldwin Smith, *Early Christian Iconography* (1918), p. 93, and no doubt elsewhere.



Diptych belonging to Mr. F. E. Andrews, H. 12 in.



Officials presiding at an Elk-fight: leaf of a diptych
in the Liverpool Museum (3).

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EARLY CHRISTIAN IVORY DIPTYCH 101

When a work of art of this kind has no early history the question of its authenticity becomes all-important. I do not believe that any competent person who examines this diptych carefully can hesitate as to its genuineness. But before proceeding to discuss it in detail I should like to say that since it has been in my charge I have been able to show it to four authorities whose joint opinion will, I think, be accepted by the most sceptical as conclusive in its favour; our President Sir Hercules Read, our Fellow Mr. Dalton, Monsieur Babelon of the Cabinet des Médailles at Paris, and Professor Goldschmidt of the Berlin University.

The diptych, of which pl. IX shows the carved outer faces, measures 12 in. in height, and each leaf is $3\frac{7}{8}$ in. in width—nearly $30\frac{1}{2}$ by 10 centimetres. This is about the average height for a ceremonial diptych, though less than the usual width. Each leaf is divided into three practically square panels, a shade under $3\frac{1}{2}$ in. each way, separated from one another by a conventionalized acanthus border; and a narrower border of egg-and-tongue type surrounds the whole. The panels represent (1) the Miracle of the Loaves and Fishes, (2) the Healing of the Blind Men, (3) the Healing of the Man sick of the Palsy, (4) the Raising of Lazarus, (5) the Miracle of Cana, and (6) the Healing of the Leper. The lower right-hand corner, containing part of this last subject, has been broken away, and the ivory is whitened and dulled in the neighbourhood of this damage in a way that suggests the action of fire. There are also a few small breaks along the inner borders of the two leaves, and a large keyhole cut in the left-hand leaf. Small nails have been driven in rather freely in various places; one of these has broken away a chip from the upper border on the left-hand leaf, and another, one of the two or three iron nails used, has caused a clot of rust to form on the same leaf.¹

Finally, two narrow strips of bone have been nailed on at the inner edge to repair a breakage caused by the addition of a hinge.

On turning the leaves over it will be seen that they present faint traces of painting. The aureoles of two standing saints are clearly visible, but the figures themselves have almost completely disappeared, with the exception of a hint of hands and feet on what has now become the right-hand panel. The painting is much later in date than the carving; probably not earlier than the eleventh or twelfth century, and perhaps even later. It is clearer on a photograph than on the original.

On what are here shown as the inner edges a groove has been cut away for a metal hinge or hinges, causing the damage already

¹ On the knee of the first blind man.

alluded to. This hinge was a later addition, fitted at a time when the diptych was treated in the medieval fashion and folded with the carved surfaces inside. On what are here the outer edges are traces of the original method of fastening—narrow slots about a centimetre (or less than half an inch) in length, formed by a row of small overlapping drill-holes, so that the edges are serrated. Similar slots may be seen on a number of consular diptychs,¹ always in a diagonal arrangement (not facing one another), and various suggestions have been made as to their purpose—it has been supposed that a thong ran diagonally from leaf to leaf.

The true method of fastening is, however, explained by reference to the diptych of Areobindus² preserved in the Cathedral Library at Lucca. This has kept its original hinge—clearly shown in the engraving in Gori—which consists of a series of brass loops fastened in the slots with pegs, and a long brass pin with a knob at each end running through them.³

But in the diptych we have here, and in others too, metal loops could never have been fastened in the narrow slots, and there are no pegs. It would have been easy, however, to fasten in loops of leather or parchment with glue,⁴ and we may safely assume that this was done; the pin running through them was no doubt of metal.⁵

At a subsequent date, to judge by the nails and the keyhole, both leaves of the diptych were nailed to a small door, possibly on a tabernacle. The two leaves have thus been fastened in one way or another three times—by loops and a pin, with the carved surfaces outside; by metal hinges, with the carved surfaces inside; and by nails on a door. All things considered they have escaped with wonderfully little damage.

It will be noticed that the leaves are here shown in the reverse of their original position; the original fastenings were on what are here the outside edges. But the inscriptions on consular diptychs show that in nearly every case they were treated as we treat bookbindings, so that if opened and looked at from the back the inscription begins on the right-hand leaf; and this is probably the best order in which to reckon the subjects here.

¹ For example, on the diptych of Rufus Gennadius Probus Orestes (530) in the Victoria and Albert Museum (no. 139-1866), though here they are cut in the edges of the leaves so that they can only be seen from the sides.

² Gori, *Thesaurus Diptychorum* (1759), I, pl. viii.

³ This of course explains why the slots are not opposite to one another.

⁴ In the Orestes diptych the slots show actual traces of glue or similar matter.

⁵ Curiously enough the consular diptych formerly at Novara, but now at Bologna (Westwood, p. 378), has one of the leaves fastened on upside down, yet the remains of the original fastenings show that this has been so from the first.

Before considering any of the subjects represented in detail it may be convenient to discuss any points that connect this diptych with other ivories and works of art already known, and so give some clue to its date. Roughly speaking, such ceremonial diptychs as have survived date from the end of the fourth century to just before the middle of the sixth. The large majority (in the case of actual consular diptychs, about seven out of eight) belong to the first forty years of the sixth century, the consulship having been abolished after 541. Then, after a break, Christian diptychs reappear in the West in Carolingian times, and these are sometimes rather closely based on earlier models.

There are certain features in the general appearance of Mr. Andrews' diptych which may seem unusual in work of the Early Christian period; but none of them, so far as I can see, would be more easily paralleled in Carolingian times. On this point the opinion of Dr. Goldschmidt, by far the greatest living authority on Carolingian ivories, who examined the diptych thoroughly a few weeks ago, must have great weight, and he emphatically agrees that it should be placed in the earlier period.¹

Unfortunately, while there are plenty of securely dated ivories for the first half of the sixth century, this is not the case with the fifth. There are, however, a few dated pieces and certain others as to the date of which there is a pretty general agreement, and of these one shows a close relationship with our diptych. Among its most salient features are the long swollen upper lips of the faces, exaggerated in some cases almost to the verge of caricature; the flat dry acanthus moulding of the borders; and the curious indication of rough ground by a series of shallow pits.

Now all these features are also to be seen in a most beautiful diptych-leaf in the Liverpool Museum² which represents three officials presiding at an elk-fight in the arena, conducted very much on the lines of a modern bull-fight (pl. X).³

A comparison in detail between these two ivories makes it extremely likely that they have a more or less common origin.

¹ Since this paper was read another leading Continental authority on Carolingian art, Dr. Swarzenski, has seen the diptych, and takes the same view.

² Venturi, I, p. 363, fig. 135.

³ The scenes in the arena seem to be continuous; at the top is a dead elk, left from the last event, then below a fresh elk is let out of what is nowadays the *toril*, and charges one of the minor performers who dodges behind a door. In the next scene the elk is given the spear by the *matador*, and below he is seen dying, while at the bottom a third elk is let out. The engraving on the lower door is an interesting feature; it is also found on the Trivulzio *Maries at the Sepulchre*, and the relief of the same subject from a box in the British Museum, both ivories of early fifth-century date at latest.

The personages of the Liverpool leaf are not identified, but though a very early date was once suggested for it,¹ it is now almost universally accepted as belonging to the first half of the fifth century.

The Liverpool leaf is closely related to another diptych-leaf at Brescia with three similarly placed figures presiding at a chariot race. This leaf is inscribed [LA]MPADIORVM,² but the inscription does not, unfortunately, enable it to be dated with certainty, as it seems impossible that it should refer to the only known consul of that name in 530. It was suggested many years ago by Meyer³ that it was made for an official, not a consul, of that family who was giving shows in the arena between 442 and 450, and later authorities, such as Haseloff,⁴ Wulff,⁵ and Graeven,⁶ have also dated it in the fifth century.

The large upper lips also occur on other early ivories; on the relief of three figures in the Bibliothèque de l'Arsenal at Paris,⁷ on a diptych-leaf at Bologna, and—what is more helpful—on the diptych of Probus at Aosta,⁸ which can be definitely dated in the year 406 and represents Honorius.

The acanthus borders dividing the scenes may further be compared with those on the double book cover in Milan Cathedral⁹ and on the diptych of Boethius (487) at Brescia;¹⁰ part of a more or less similar acanthus border may also be seen on the Bellerophon relief in the British Museum.¹¹ The closest analogy, however, seems certainly that of the Liverpool diptych-leaf, which is probably earlier in date than the Brescia diptych or the Milan book-cover.

If we turn now to the architectural backgrounds which are such a marked feature of the panels on our diptych, we shall find

¹ Westwood dated it 248, pp. 11–12, no. 37.

² Venturi, I, p. 494. The embroidered dress of the chief official and the coarser ornament suggest that it is rather later in date than the Liverpool diptych-leaf.

³ *Zwei antike Elfenbeintafeln* (1879), pp. 34–5.

⁴ *Ein altchristliches Relief in the Jahrbuch der preussischen Kunstsammlungen*, xxiv (1903), p. 56, as beginning of the fifth century.

⁵ *Altchristliche Kunst* (1918), p. 193, as c. 480. No reason is given for this late dating.

⁶ *Römische Mittheilungen*, xviii (1913), pp. 246 ff.

⁷ Venturi, I, p. 395, fig. 361.

⁸ Venturi, I, p. 357, fig. 330; Molinier, p. 17, pl. 2.

⁹ Romussi, *Il Duomo di Milano* (1902), pl. xxxiv.

¹⁰ Venturi, I, p. 364, fig. 336.

¹¹ Dalton, *Catalogue*, no. 6; where the acanthus border is taken as an indication of rather later date. It occurs, however, in an almost identical form on the Munich relief of the Resurrection, as part of the decoration of the Sepulchre, and this relief can hardly be classed except with the earlier ivories.

that the clearly indicated courses of brick or stonework are characteristic of a whole group of early ivories which are generally dated in the first half or at the beginning of the fifth century. A few examples which may be cited are the relief of the Maries at the Sepulchre, and the relief of St. Paul and Thecla in the British Museum, both dated by Mr. Dalton early fifth century; the relief of Christ among the Doctors in the same collection, dated fifth century;¹ the relief of the Nativity and the Adoration of the Magi in the Museum at Nevers;² the double book-cover in Milan Cathedral, around which a whole group of other ivories has been classed; and, last but by no means least, the lovely relief of the Maries at the Sepulchre in the Trivulzio collection,³ which probably dates, with the SYMMACHORVM diptych-leaf at South Kensington which it almost rivals in beauty, from the very beginning of the fifth century or even the end of the fourth.

A similar treatment of architecture may be seen on the fifth or sixth century wooden doors of St. Sabina at Rome. But a far closer parallel is furnished by the end panels of the well-known marble sarcophagus, now in the Christian Museum of the Lateran, which was discovered near the Vatican in 1591.⁴ This sarcophagus is, I believe, generally considered as belonging to the fourth century. The front is of a normal type; the ends, which are quite unlike any others, represent Moses striking the Rock, with Christ Healing the Woman with an Issue of Blood, and Christ and St. Peter. There is no need to insist on their very close resemblance to the panels on our diptych. Wulff⁵ has suggested that the buildings may be intended to represent Jerusalem, and that the sarcophagus was made under Palestinian influence.

A similar use of buildings as a background symbolizing Jerusalem (though for obvious reasons the similarity is not so striking) may be seen in the noble mosaic in the apse of Santa Pudenziana at Rome,⁶ which almost certainly dates from the fourth century, and probably from the latter part of it.

¹ *Catalogue*, nos. 7, 8, and 9, pl. iv and v.

² Haseloff, *op. cit.*, p. 52, fig. 3.

³ Molinier, pl. vi.

⁴ Marucchi, *I Monumenti del Museo Cristiano Pio-Lateranense* (1910), p. 22, pl. xxix, 2 a and b; and Venturi, I, pp. 74-5. There is a detailed description of these reliefs, with a bibliography, in Ficker, *Die altchristlichen Bildwerke im christlichen Museum des Laterans* (1890), no. 179, where the marble is identified as Greek but no date is given; cf. *Archaeologia*, xl, p. 190, where a date as late as the sixth century is suggested. They have been quite recently discussed by Dr. Heisenberg in the *Sitzungsberichte der bayerischen Akademie* for 1921. The head of the Christ healing the Woman is restored.

⁵ *Op. cit.*, p. 115.

⁶ Dalton, *Byzantine Art*, fig. 203, and pp. 336-7.

There are other questions of style which it would be rather difficult to discuss without more illustrative material. The humpy convolutions representing raised ground in the Miracle of the Loaves and Fishes, for example, could be compared with the same convention on the ivory at Munich (probably dating from the early fifth century) with the Three Maries at the Sepulchre and the Ascension,¹ as well as on sarcophagi. The very conventional trees, again, are rather closely akin to others on ivories falling within the groups which have been already mentioned.

But a point of greater interest and importance is the manner in which the figures are placed with regard to the lower edge of the panel. As a rule—though no doubt there are exceptions—it will be found that in ivories of the sixth and latter part of the fifth centuries, so far as they can be dated, the figures stand directly on the lower edge or border of the panel in which they are contained; while in ivories of the beginning of the fifth century a definite ground or floor is indicated on which the figures stand. This ground may be like a shelf at right angles to the background as in the panels with scenes from the Passion in the British Museum,² and in this case the figures are in very full relief. But more commonly it is shown as it were in perspective, sloping back from the lower edge, so that the feet of the figures are separated by a certain distance from the edge itself, and are themselves seen in perspective. I believe that this treatment of the ground is another argument in favour of a relatively early date for our diptych.

The points which have just been mentioned concern the artistic style of the carving. In considering the iconography, there are certain features common to all or most of the scenes which may be dealt with first. The figure of Christ is beardless throughout. In four out of the six scenes, but not in the Raising of Lazarus or in the Miracle of Cana, He has a nimbus, which in three cases is engraved with a cross—there is on the fourth nimbus a single short engraved line which suggests that it was also intended to bear a cross. This inconsistent and apparently casual use of the nimbus is not uncommon on Early Christian ivories.³ It is not given here to the Virgin Mary or to the apostles. Of the apostles in the first scene three are beardless and one bearded. The bearded apostle, the type of whose face suggests that he may be intended for St. Peter, recurs in the Healing of the Paralytic, and another bearded apostle appears in the Raising of Lazarus. The young beardless apostle in the Healing of the Leper carries the roll of

¹ Venturi, I, p. 77, fig. 60.

² Dalton, *Catalogue*, no. 7.

³ Cf. Krücke, *Der Nimbus* (1905), p. 62.



The Miracle of the Loaves and Fishes,
and the Healing of the Blind ($\frac{1}{2}$).



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a book, as does the bearded apostle in the Healing of the Paralytic.¹ Christ carries a similar roll in every case, and in two of the miracles He also carries a wand, to emphasize the supernatural character of the act.

Christ and the apostles wear the conventional colobium or sleeved tunic, pallium, and sandals; the Virgin in the Miracle of Cana wears a sleeved tunic and cloak. The blind men wear tunic, paenula, and (apparently) boots; the paralytic a girdled tunic and gartered leggings; the servant in the Miracle of Cana a scanty *exomis*.

The folds of the pallium are treated very richly, and they suggest in at least two cases the weighted ends or rather corners which may be seen on the SYMMACHORVM diptych-leaf and on other ivories of the earlier period.

As a subject for art, the Miracles of Christ seem to have appealed with peculiar force to the first generations of the Christian Church. A few of them, especially miracles with an obvious doctrinal value like that of Cana, retained their popularity, but as a rule they tended to drop out in favour of scenes from the Childhood and Passion of Christ, which had at first occupied a relatively modest place. Among the paintings in the Catacombs dating from the second and third centuries it has been reckoned² that the Raising of Lazarus occurs about fifty times, the Miracle of the Loaves and Fishes about thirty times, the Healing of the Man sick of the Palsy about twenty times, the Healing of the Blind seven times; apart from these miracles the story of the Magi is illustrated seven times, and no other New Testament scene more than four times.

It must be remembered that a very large proportion of what remains of Early Christian art is connected with the dead. And it would seem that belief in the cardinal doctrine of the resurrection of the body was enforced by an appeal to the miracles as evidence of the power of Christ—an appeal that may be traced in early liturgical formulae as well as in art.

To cite two or three examples almost at hazard out of many, we find on each of two typical fourth-century sarcophagi in the Lateran³ and at Arles⁴ the Miracles of Cana and of the Loaves and Fishes, and the Healing of the Blind; combined in one case with the Raising of Lazarus, and in the other with the Healing of the Man sick of the Palsy and the Woman with an Issue of Blood and the Raising of the Widow's Son.

¹ For the introduction of the Apostles compare Ficker, *Die Darstellung der Apostel in der altchristlichen Kunst* (1887).

² Kaufmann in *Der Katholik*, xxxviii (1903), p. 407.

³ Marucchi, pl. xxvi, 1.

⁴ Wulff, fig. 106.

Again, on a sixth-century ivory pyxis in the Vatican we find¹ the Raising of Lazarus and the Healing of the Blind, the Man sick of the Palsy, and the Woman with an Issue of Blood. Many other pyxides have similar representations.²

¹ Kanzler, *Gli Avori . . . della Biblioteca Vaticana*, pl. ii; Garrucci, *Storia*, vi, pl. 438, 3.

² Such subjects were not of course confined to sculpture. In his homily on *Dives and Lazarus*, Asterius, bishop of Amasea, who was writing in the late fourth and early fifth century (perhaps only a few years before our diptych was carved), severely criticizes the habit of wearing dresses embroidered with pagan or merely fantastic subjects, and contrasts with these the dresses of the pious, on which 'you will see the Marriage in Galilee and the water-pots, the Paralytic carrying his bed on his shoulders, the Blind Man healed with clay, the Woman with an Issue of Blood touching the hem of the garment, the Woman that was a Sinner falling at the Feet of Jesus, Lazarus returning to life out of the Grave'. Four out of six subjects on this list are identical with four out of the six on our diptych. For the text, see Reil, *op. cit.*, p. 31, and Kraus, *Geschichte der christlichen Kunst*, i, p. 389.

Again, among the thirteen scenes in the early sixth-century mosaics on the left wall of S. Apollinare Nuovo at Ravenna the large majority are miracles. They represent: The Paralytic carrying his bed (at Bethesda?), the Demoniac and the Gadarene Swine, the Paralytic let down through the roof (at Capernaum?), the Separation of the Sheep and the Goats, the Widow's Mite, the Pharisee and the Publican, the Raising of Lazarus, the Woman of Samaria at the Well, the Woman taken in Adultery (sometimes called the Woman with an Issue of Blood), the Healing of the Two Blind Men, the Miraculous Draught of Fishes, the Miracle of the Loaves and Fishes, and a last scene (largely restored) which probably represented the Miracle of Cana. See Ricci, *Ravenna* (1906), pp. 69 ff., figs. 57-69; and an article by the same writer in *Emporium*, xv (1902), pp. 261 ff.

The only exact parallel to the selection of these particular six miracles that I have come across is in literature. In the summary of the life of Christ in the once famous *Hymnum dicat turba fratrum* (which, if it is correctly ascribed, as seems probable, to St. Hilary of Poitiers, must date from just after the middle of the fourth century and rank among the earliest of Latin hymns) six miracles only are mentioned; and, allowing for the use of general terms for the fourth and perhaps for the first, they correspond precisely with our diptych.

'debiles facit vigere, caecos luce inluminat,
verbis purgat leprae morbum, mortuos resuscitat,
vinum quod deerat hydriis mutari aquam jubet
nuptiis mero retentis propinando populo,
pane quino, pisce bino quinque pascit milia
et refert fragmenta cenae ter quaternis corbis.'

The third and fourth lines quoted are obscure, and probably corrupt, but there is no doubt as to their general sense; cf. Walpole, *Early Latin Hymns* (1922), pp. 8-9.

The letter of Pope Gregory II to the Emperor Leo (which, if authentic, though this has been disputed, dates from about 730) suggests a typical scheme of decoration for a church in which the same six miracles appear to be selected, but the meaning is not quite clear; cf. Reil, *op. cit.*, p. 116.

The anonymous *Tituli* of the fifth century (?) once ascribed to Claudian refer to seven miracles of which five are the same as on our diptych; the Leper is omitted, and Christ walking on the Water and the Healing of the Woman with an Issue of Blood are added; cf. Von Schlosser, *Quellenbuch* (1896), pp. 30-2.

No other diptych, however—in the strict sense—carved with miracle subjects is known. The only diptychs carved as this is with a set of subjects from the New Testament, are the one in Milan Cathedral with scenes from the Passion and Resurrection of Christ, and the one in the Bargello at Florence of which the right-hand leaf has scenes from the life of St. Paul. In neither case are the subjects treated at all in the same way. But there is at Milan the magnificent ivory book-cover already referred to, each side of which may be regarded as a composite diptych; and on one side there are two separate panels of ivory, each about 8 in. by $3\frac{1}{2}$ in., which would together form a small diptych rather similar in design to the one we have here this evening. Each panel is divided by acanthus borders into three compartments, and the six subjects represented are: the Healing of the two Blind Men, the Healing of the Paralytic, the Raising of Lazarus, Christ as Teacher, the Feeding of the Five Thousand, and the Widow's Mite (the interpretation of the last two subjects being rather uncertain). The lower border of the same cover shows the Miracle of Cana.

This book-cover is perhaps rather later in date than our diptych; while a single panel at Berlin¹ with the Massacre of the Innocents, the Baptism of Christ, and the Miracle of Cana, which probably formed part of a similar book-cover or composite diptych with the Nevers fragment already referred to, may be rather earlier. But as far as the subjects are concerned they seem to furnish the closest analogies to it, and each of them belongs to a group with which, as we have seen, it has some stylistic connexion.

The Miracle of the Loaves and Fishes is very commonly represented in Early Christian art; as a rule with reference to the story of the Feeding of the Five Thousand, told by all four Evangelists, in which five loaves and two fishes are specified. It is one of the very earliest subjects represented in the Catacombs; sometimes under a symbolical form with the loaves and fishes alone, either as a mere outline or as a regular still-life painting, and sometimes as a banquet at a *sigma*-shaped table. On sarcophagi, however, the normal scene is one in which Christ stands between two apostles touching—either with His hand or with a rod—the baskets they hold up containing the loaves and the fishes.

On an ivory pyxis of the sixth century at Leghorn,² Christ, still touching the baskets, is seated. Here, however, His gesture

¹ Haseloff, *op. cit.*

² *Bullettino Archeologico Cristiano*, 1891, pl. iv, v; the pyxis was found at Carthage.

is quite independent of them, and the scene may perhaps be regarded as a combination of the favourite subject of Christ as Teacher¹ with the miracle. The well-known silver box at San Nazzaro in Milan² shows a seated figure of Christ in a very similar attitude with baskets of bread and jars of wine at His feet—a parallel combination of ideas, in a representation that may be dated well before the end of the fourth century.

The loaves, with their spoke-like markings and pierced centres, are of a characteristic classical form.³ The objects carried by the riders on the elephants in the Romulus diptych-leaf of the fourth century in the British Museum⁴ seem to be similar loaves.

There is one other small detail to which it may be worth while to call attention. The unusual zigzag or vandyked edges to Christ's dress in this and other reliefs may be paralleled on the early fifth-century stucco reliefs in the Baptistery of the Orthodox at Ravenna.

The pose and gesture of the seated Christ are typical of the period, and it is interesting to see how closely they derive from classical models. The diptych of Probianus, vicar of Rome, in the Berlin Library,⁵ which is generally dated in the late fourth or early fifth century, shows the vicar wearing the *trabea* and seated in judgement (apparently in a senatorial suit) with two shorthand writers beside him taking notes—represented on a smaller scale to show their relative unimportance. The resemblance to a Christ enthroned between saints is almost startling, and extends even to the hand resting on the book and the gesture of emphatic speech which anticipates the Latin gesture of benediction.

The next subject, the Healing of the Blind,⁶ is far from rare, though not quite so common as the miracle of the Loaves and Fishes. As a rule only one blind man is shown, either by compression, or following the story told by St. Mark.⁷ Kaufmann notes it⁸ as occurring seven times in Catacomb paintings, and it

¹ Common as a central subject on sarcophagi; it is magnificently represented on the fourth or perhaps fifth century pyxis at Berlin.

² Best illustrated in the *American Journal of Archaeology*, xxiii (1919), pp. 101 ff. The doubts there expressed as to the fourth-century date of the box seem quite unjustified.

³ They may be seen in the painting of a baker's shop discovered at Pompeii, where actual loaves of a similar form, but with raised centres, have been found; see the article *Boulangers* in Dom Cabrol's *Dictionnaire d'Archéologie chrétienne*.

⁴ *Catalogue*, no. 1; they are described as cymbals or discs.

⁵ Molinier, pl. iv; Venturi, I, p. 356, fig. 329.

⁶ Matthew ix, 27.

⁷ Mark viii, 22.

⁸ *Handbuch der christlichen Archäologie* (1922), p. 341; based on an earlier article in *Der Katholik*, xxxviii (1903), pp. 407-10.

is often found on sarcophagi. The representation here, at least as far as the leading figure goes, is typical, the stick being introduced as a symbol of blindness; even the half-kneeling gesture occurs on other ivories. But the finely imagined movement of the second blind man, leaning on the shoulder of the first and stretching out a hand in entreaty, occurs (as far as I know) nowhere else. Perhaps the nearest representation is that in the mosaic of S. Apollinare Nuovo, dating from the first half of the sixth century, but here the second blind man merely walks behind the first.¹

It is interesting to note that the blind men, alone among the figures on this diptych, are wearing the paenula which in the fourth century had replaced the pallium for official dress just as the pallium itself had at an earlier date replaced the toga. It is not easy to explain why the blind men should be so distinguished, but they usually are; there is an example which may date from the fourth century on an ivory comb in the Cairo Museum,² and in the sixth century the panel on the ivory chair of Maximian at Ravenna, like the mosaic in S. Apollinare Nuovo, shows an almost exactly similar paenula, while other instances might be quoted from pyxides of about the same date.

The paenula is of course the origin of the Christian chasuble, and it may be seen here how closely it resembles that vestment in its full bell-shaped form. Even the Y or rather Ψ-shaped decoration at the neck anticipates the normal lines of the orphrey at a later date.³

The Healing of the Man sick of the Palsy, whether it be taken to represent the miracle at Capernaum⁴ or that at Bethesda,⁵ is

¹ In the Gospels of Rabula (Strzygowski, *Ursprung der christlichen Kirchenkunst* (1920), pl. xxxiv) the first figure, upon whom the second is leaning, looks like a boy guide; both have sticks. On a Carolingian ivory book-cover at Würzburg, however (Goldschmidt, *Elfenbeinskulpturen*, i, 82), the grouping of the two blind men is very similar to that of our diptych.

² Strzygowski, *Koptische Kunst* (1904), p. 194, pl. xvii, dated fourth-fifth century; here combined with the Raising of Lazarus.

³ Other examples of the paenula with Ψ-shaped decoration occur on the ivory pyxis with the story of St. Menas in the British Museum (Dalton, *Catalogue*, no. 12), and in miniatures of the Rossano MS. and the Vienna Genesis. They are generally worn by Jews. The point has been discussed by Haseloff, *Codex Purpureus Rossanensis* (1898), pp. 66 ff., and by Braun, *Die liturgische Gewandung*, pp. 239 ff. In the S. Apollinare Nuovo mosaics these decorated paenulae are worn—apart from the two blind men—by the Pharisee and the Publican, and by the Scribes and Pharisees accompanying the Woman taken in Adultery. Similar paenulae are worn by SS. Cosmas and Damian and other figures in the sixth-century Coptic wall-painting from Wadi Sarga now in the British Museum.

⁴ Matthew ix, 2; also in St. Mark and St. Luke.

⁵ John v, 9.

another common subject in Early Christian art. It occurs about twenty times among the paintings of the Catacombs, the earliest example dating apparently from the first half of the second century, and it is frequent from the fourth century onwards on sarcophagi and ivories. The normal representation illustrates, as in the present case, the command 'Take up thy bed and walk'; the bed, unusually elaborate here, is sometimes carried upside down. Among ivories showing a somewhat similar treatment we might compare the late fifth-century book-cover at Milan already cited, and the two sixth-century book-covers at Ravenna (from Murano) and in the Bibliothèque Nationale in Paris.¹

The bed, with its turned legs and bars and its interlaced straps, has a distinctly oriental appearance. The gartered leggings of the paralytic may be compared with those worn by the performers in the arena on the Liverpool diptych-leaf.

Artistically speaking, this scene appears to me the finest of all. But on the whole the workmanship of the three scenes on the first leaf, which we have just been looking at, is distinctly finer than that of the second leaf, both in the figures and in the ornamental details such as the border, though this difference in quality could not be stressed to imply a difference of hand.

The Raising of Lazarus, the first panel on the other leaf of our diptych, is the commonest of all subjects of this kind in the Catacombs, where it occurs over fifty times from the second century onwards. On sarcophagi it is equally common, and for the same obvious reasons; there are about thirty examples among those engraved by Garrucci. In these sculptured representations the normal composition includes an apostle standing beside Christ and the kneeling or crouching figure of Mary at His feet. It occurs on the three ivory book-covers already mentioned in connexion with the Healing of the Man sick of the Palsy, in its simplest form (without additional figures) at Ravenna and Paris, and in its fuller form with Mary and the apostle at Milan, where, however, the figures are arranged in a rather different composition.

The apparition of Lazarus as an upright mummy-like figure, swathed in his cere-clothes, standing at the door of a shrine-like tomb, is perfectly normal in Early Christian art. Occasionally, but rarely in this primitive period, the tomb appears as a cave in the rock instead of as a building with stairs, and this rock-cave representation becomes at a later date a characteristic of Eastern as opposed to Western iconography. What is peculiar here is the slight bend in the knees of Lazarus, as if he were beginning

¹ Dalton, *op. cit.*, pp. 202, 207-10.

to move his limbs; exactly the same movement is to be seen on the door-panels of the Holy Sepulchre in the magnificent early fifth-century diptych-leaf in the Trivulzio collection at Milan,¹ where tiny figures of Christ and Lazarus are engraved.²

The cross-hatching on the grave-clothes is a common form of ornament in early ivories; often it indicates embroideries, but on the early Romulus panel in the British Museum³ it is used to render the rough hides of the elephants.

The Miracle of Cana, with the changing of the water into wine, is a subject that occurs rarely in the Catacombs—only three paintings are noted by Kaufmann—but often on sarcophagi and, to some extent, on ivories. The different types of iconography are rather numerous, and representations with the Virgin alone and a single servant pouring water into the six pots are not common:⁴ a later one, almost identical in design, is to be seen on the early ninth-century silver box of Pope Paschal I (817–24) in the Sancta Sanctorum at Rome.⁵ On sarcophagi Christ as a rule appears alone, but it must be remembered that on a sarcophagus the subjects are generally compressed as far as they can be so as to enable a large number of scenes to be represented side by side. On the Berlin ivory already mentioned Christ is accompanied by an apostle instead of by the Virgin.⁶

It may be noted that the dress and pose of the servant pouring the water (artistically, perhaps, the poorest figure of all) are curiously reminiscent of the St. John Baptist in the same fragment of a composite diptych at Berlin.

The Healing of the Leper, in marked contrast to the other five miracles represented on our diptych, is a very rare subject indeed in Early Christian art.

Three paintings representing it have been rather tentatively identified in the Catacombs, and it also occurs on the late sixth or early seventh century gold medallion or *encolpion* at Constanti-

¹ Molinier, pl. vi. The other panels have Christ and Zacchaeus and the Healing of the Blind Man (?).

² The same movement of the body becomes more pronounced in the sixth-century mosaic in S. Apollinare Nuovo at Ravenna.

³ Dalton, *Catalogue*, no. 1.

⁴ The iconography of this and of some other subjects in Early Christian Art has been elaborately worked out by Mr. E. Baldwin Smith in his *Early Christian Iconography and the School of Provence* (1918); though his conclusions as to the localization of different schools have not met with general acceptance.

⁵ *Monuments et Mémoires* (Fondation Piot), xv, pl. ix, p. 66.

⁶ The composition is otherwise rather similar; it is almost repeated, but in reverse, in Ciampini's engraving of the mosaic in S. Apollinare Nuovo, since wrongly restored (*Emporium*, xv (1902), p. 273, where Ricci notes the likeness to our diptych, which, however, he misinterprets).

nople published by Strzygowski,¹ on one of the supposedly later columns of the altar in St. Mark's, Venice (perhaps of the same date, or rather later), and in manuscripts of which the earliest is the Syrian Gospel-book of Rabula at Florence, dated 586. But all these representations are quite differently conceived; I think in all of them, so far as they can be made out, the leper is clothed and kneels (or, in the later MSS., stands) before Christ. Here the figure immediately suggests the later medieval idea of Job.² He is sitting naked on a mound, supporting himself on a stick, and his body is covered all over with spots to symbolize the disease from which he is suffering. Both St. Mark and St. Luke speak of the leper kneeling or falling on his face, and St. Matthew's words imply a similar approach to Christ, so it is difficult to explain this very peculiar composition for which, as far as I know, there is no parallel. Yet we can hardly doubt that it is the Healing of the Leper that the artist has represented.

The indication of a plant on the ground by engraved lines is unusual; there seems to be no other example of this treatment on an early ivory. It may be worth while also to call attention to the very Gothic-looking quatrefoil that decorates the pediment of the temple-like building behind the leper's head. The architectural ornaments in all these panels are of a more or less fantastic character, and no doubt the resemblance of this quatrefoil to the ornamental forms current in northern Europe in the thirteenth and following centuries is quite accidental. A quatrefoil does, in fact, occur as a gable ornament in the early eleventh-century MS. of Aelfric's Paraphrase of the Pentateuch in the British Museum,³ where an apparent anticipation of Gothic forms is hardly less remarkable.

If the presence of the Healing of the Leper on this diptych is an exception, we may perhaps say the same of the absence of the Healing of the Woman with an Issue of Blood. This miracle is often represented on sarcophagi and elsewhere; an early legend asserts that the woman had a group erected showing herself at the feet of Christ, and that this group was only destroyed under Julian the Apostate, and it has been suggested⁴ that a reflection of

¹ *Das Etschmiadzin Evangeliar* (1891), pl. vii, p. 106.

² The figures of Job on early sarcophagi are quite differently imagined. But a miniature in the seventh-century Syrian Bible in Paris (MS. Syr. 341) shows him naked and spotted in a not dissimilar position. It seems possible that our Leper may be based on an earlier version of such a representation of Job. Cf. Wulff, *l. c.*, p. 292, fig. 274, from *Monuments et Mémoires* (Fondation Piot), (1909), xvii, pl. vi, p. 92.

³ MS. Cott. Claud. B. IV. See *Sussex Archaeological Collections*, xlv, p. 94.

⁴ Wulff, *op. cit.*, p. 115; Kaufmann, *Handbuch* (1922), p. 340.

it may perhaps be traced in existing reliefs, such as that from the sarcophagus in the Lateran already cited in reference to the architectural backgrounds of the end panels.

There is at least one more point which it is impossible to avoid altogether, the question of where this diptych was made. There are few subjects more despairingly difficult than that of the localization of the Christian art of the fourth, fifth, and sixth centuries. On the whole, there is an increasing consensus of opinion that the greater part of Early Christian art is derived (as would be natural enough) from the eastern end of the Mediterranean; from Egypt, from Palestine, and from northern Syria. It is possible that, as Wulff would appear to believe, almost all the sarcophagi and ivories with which we are familiar in western Europe were made in and exported from the East, improbable as it might seem that such heavy objects could be systematically transported over immense distances.¹

If it is difficult to get any suggestions from the localization of sarcophagi it must obviously be even more difficult to do so from ivories, which were by their very nature made to be transported from place to place. By a curious fate all the fifth-century consular diptychs that have survived were made for consuls holding office in Rome, and all the sixth-century diptychs except one for consuls holding office in Byzantium. As this one exception—the diptych of Orestes at South Kensington—is just like the rest, there is not much help to be got from consular diptychs.

But it can fairly be said that all the ivories with which Mr. Andrews' diptych is most clearly related—the Liverpool diptych-leaf with the elk-fight, and the group of fine early diptychs with which it is associated through the LAMPADIO-RVM-leaf at Brescia, as well as the Milan book-covers and the important series of Christian ivories connected with them²—are precisely those for which a Western origin has generally been claimed by writers who have attempted to establish a division between the Eastern and Western schools. The first group has been very tentatively associated with Rome, where the production of works of art must have received a check when the city was sacked by Alaric in 410; the second and later group with Milan. But there is very slight evidence for either suggestion.

As to date, the ground is a little surer. Our diptych shows some kinship with work that may be definitely dated at the very

¹ The fact that the sarcophagi found in southern France are on the whole closely similar to those found in Rome does suggest a common place of origin.

² The three-panelled fragment at Berlin, like Mr. Andrews' diptych, may be placed in some respects as a connecting link between these two groups.

beginning of the fifth century—the time, let us say, when St. Ambrose and St. John Chrysostom were just dead, when St. Jerome and St. Augustine were still alive—and practically all the ivories that can be closely connected with it are generally accepted as of fifth-century date. I believe that we may safely consider it as an example of fifth-century carving, on a level indeed below that of the finest ivories of the period, but as definitely above some of the inferior examples that have survived; and a most precious addition to the recorded documents of the earliest epoch of Christian art.

DISCUSSION

Mr. DALTON recognized the fine monumental character of the diptych, which clearly showed the influence of good models. On first seeing the large photograph, he had been inclined to agree with Mr. MacLagan's view; but a more careful examination had awakened misgivings, and he could not repress a doubt whether the real comparative material should not be sought among early Carolingian ivories, such as those connected with the 'Ada group' of illuminated manuscripts, which often reproduced early Christian models point by point. He admitted, however, that the difficulty of finding a close Carolingian parallel was great, and Mr. MacLagan's admirable statement of the case for the early fifth century not only carried weight in itself, but was supported by the authority of Prof. Goldschmidt. In defence of his doubts, he drew attention to a general weakness in the treatment of the types, and to certain points of detail, including the unhappy association of the reel-moulded borders with broad interior lines of flat acanthus, feebly treated, and apparently upside down; the borders used in the fourth and early fifth centuries were homogeneous and of good sculptural quality; carelessness seems to have set in only during the sixth. He had to confess that he remained uncertain of the date to which the carving must be assigned; but the diptych was in any case so interesting, that it might almost be said to matter little to which of the suggested periods it really belonged.

Mr. LYON THOMSON thought a layman's opinion might be useful where experts disagreed, and was convinced that the two leaves, if of the same date, were by different hands. When copies were made, details were apt to be reproduced on too large a scale; but the present want of harmony might be due to different dates of production.

Mr. ILTYD NICHOLL thought the right-hand panel inferior to the left. The figure of our Lord was of coarser execution than the rest; and the dress of the figures on that panel corresponded, but contrasted with those on the left.

The PRESIDENT had been interested in ivories for many years and hoped that he retained his appreciation of style and period. He felt that the problem was of exceptional difficulty. The evidence adduced had convinced Mr. Maclagan and Prof. Goldschmidt: it had evidently influenced Mr. Dalton, but had had less effect on himself. The date above all was in question, and the panels had to be compared not only with work of the same period in Europe but also with that of the Antioch school, of which he had been reminded by the vine-scrolls on the sarcophagus. Different results might be obtained at different centres at the same period, and in looking at the enlarged photograph he had been struck by the oriental mould of the faces. The ivory carvings dating from the early fifth century shown on the screen in illustration were infinitely finer than the exhibit, and he would suggest that it be put to the suspense account, as the figure of the servant pouring wine, for instance, clashed with his ideas of fifth-century art. The acanthus border too lacked the virility of the classical type; and it was hard to believe that this border was not much later than the fifth-century work put on the screen. The architectural backgrounds were certainly like those of the sarcophagus illustrated, but they were very inferior in execution. The paper had given food for thought and the process of digestion was naturally slow. He recommended Mr. Maclagan to compare a series of Coptic faces with those seen on the diptych in order to appreciate the oriental touch. The thanks of the meeting were due to the author of the paper and also to the owner of the ivory for allowing it to be studied and exhibited to the Society.

Mr. MACLAGAN in reply agreed with all the points raised by the President. The figure of the servant was certainly poor, but it was also the worst figure on the two panels. The acanthus was, he admitted, thin and wiry, but still did not appear to him Carolingian, any more than other features of the carving. The peculiar upper lip did not to his knowledge occur in the time of Charlemagne, but could be matched on earlier work, especially the figure of Honorius on the diptych of Probus. He thought there was a spasmodic use of the cruciferous nimbus early in the fifth century. The convoluted rock seemed to him remarkably like that on the Munich relief of the Maries at the Sepulchre and the Ascension. The lopping of the tree-trunks was a medieval feature, but were the trees of Carolingian type? It was hard to believe that the panels were by different hands. The diptych was certainly inferior to some fifth-century carvings, but all those were not of good quality: it was as good as the Milan diptych and considerably better than much sixth-century work. Some of his points might have seemed dogmatically expressed, but they had succeeded in drawing criticism, and he laid great weight on Prof. Goldschmidt's considered judgement.

*Six early carved stones from South Kyme
Church, Lincolnshire*

By A. W. CLAPHAM, F.S.A.

[Read 7th December 1922]

SOUTH KYME is a village in the Kesteven division of Lincolnshire, seven miles E.N.E. of Sleaford and eighteen miles south-east of Lincoln. The church is part of the south aisle and nave of a priory of Austin Canons founded before 1169. In the course of the erection of the modern chancel, some years ago, six carved stones were dug up on the site and were subsequently built into the structure of the north wall on the inside face of it. These stones are the subject of the present note, and the photograph and drawing made for me by Mr. P. J. Kipps give all the information to be obtained by an inspection of the stones themselves, until such time as they may be taken from the wall and their reverse sides examined.

One stone—that carved with spirals—is certainly Irish work, and others have possibly the same origin; all formed parts of panels enclosed by shallow reeded mouldings, but these mouldings do not exactly correspond in the various pieces. From an examination of a small fragment of the stone, which was submitted to the Geological Museum, there is no reasonable cause to doubt that the material is of local origin and comes from the Ancaster or some neighbouring quarry. This fact seems to imply, very definitely, that the stones were not importations, and is of material assistance in assigning a limit in date to them, at any rate in one direction. Bede records (*Ecclesiastical Hist.*, iii, 24) that after the defeat and death of Penda, the heathen king of the Mercians, Oswy, king of Northumbria, in 655, made Diuma, a Scot, first bishop of the Mercians, Middle Angles, and the Lindiswaras; this marks, apparently, the first appearance of Celtic missionaries in Lincolnshire, and therefore marks equally the earliest date for the production of Irish work there. How long Celtic influence lasted in the district it is difficult to say, but the refusal of the monks of Bardney to admit even a dead Northumbrian within their walls (Bede, *op. cit.*, iii, 11) seems to imply that it was already on the wane before the close of the seventh century.

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As to the style and design of the fragments and the deductions to be drawn therefrom, our Fellow Mr. E. C. R. Armstrong has very kindly supplied me with the following note :—

'To give an opinion without seeing the actual stones is rash, but to judge from the photograph only, it seems that the carvings do not form a single group. There can be no question as to the spirals, which are purely Irish. The frets and interlaced bands (even when divided into two as in the present case) are common forms, so that it is not possible to consider them Irish with certainty, though this may be so. The fragment with the eagle, and the stone carved with what looks like a variant of the vine-scroll pattern with birds, appear to me



FIG. 1. Carved stones in South Kyme Church, Lincs.

Northumbrian. As regards date, parallels to the spirals can be seen on the High Crosses, especially on those at Ahenny, co. Tipperary. On stonework in Ireland such carvings could well be as late as the ninth or tenth century. Without seeing the thickness or backs of the carved stones it is impossible to form an idea of the original purposes for which they were designed.'

Finally, as to the immediate provenance of the fragments, it would be natural to connect them with one or other of the early ecclesiastical foundations of Lincolnshire. Of these the site of the cathedral of Sioncester is not certainly known, the abbey of Bardney is actually situated thirteen miles north of South Kyme, and Barrow or ad Barwe was probably in the extreme north of the county. Partney (Bede, ii, 16) is about two miles north-east of Spilsby, and the location of Icanhoe (*Anglo-Sax. Chron.*, 654) is uncertain, but it

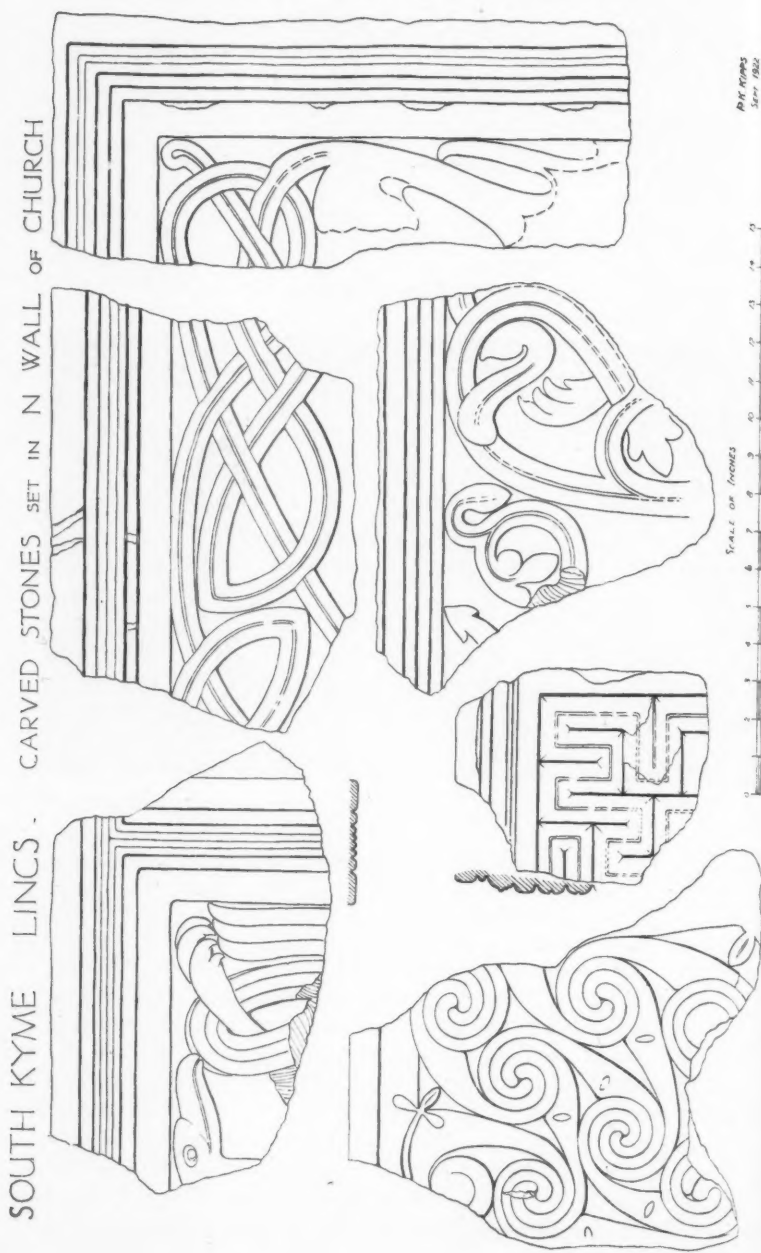


FIG. 2. Drawing of the carved stones in South Kyme Church, Lincs.

was probably situated in the neighbourhood of Boston (*V. C. H. Lincs.*, ii, 96).

DISCUSSION

The DIRECTOR said the rarity of such work on stone was remarkable; and even in Ireland, where the Late Celtic tradition was best upheld, there was little trace on stone monuments of the art that flourished in the manuscripts. Any such work in England must be attributed to Iona, or to Northumbria and other places colonized from Iona. Some of the Lindisfarne stones were of early date, but only one of the series showed Irish influence, nor could it be traced on the so-called pillow-stones. In Scotland the only stone that reproduced a motive from the Lindisfarne Gospels was at Aberlady, with an interlacing pattern of birds. To account for Irish work in Lincolnshire Mr. Clapham had mentioned Bardney monastery, and Icanhoe and Partney were both within an easy distance. The lower stone on the right was of a different character, with scrolls and floral forms in the Northumbrian or Anglian style introduced in the seventh century. The series comprised some of the most interesting carving in the country, and he only wished they could be taken out of the wall in which they had been embodied.

Mr. SANDS suggested Cornwall as an alternative source of influence.

The DIRECTOR said that history pointed to Scotland as the only source of the style in question. The latest trace of the Irish tradition was in the Psalter of St. Augustine's, Canterbury, now in the British Museum, dating from the close of the eighth century, but earlier work showed a good deal of it, and there was evidence that it spread nearly all over Britain.

The PRESIDENT expressed the thanks of the Society to Mr. Clapham for a discovery of great rarity and interest.

FIG. 2. Drawing of the carved stones in South Kyme Church, Lincs.



Early Anglo-Saxon Weights

By REGINALD A. SMITH, F.S.A.

[Read 7th December 1922]

IN our *Proceedings*, xvi, 174, is an illustration of a bronze weight found at Grove Ferry, near Fordwich, Kent, and exhibited by Col. Copeland, who subsequently presented it to the British Museum. There is a description by our present President, with references to other weights from Kentish graves of the sixth century, which were later studied by Mr. Fred. Seebohm;¹ but it has recently been re-weighed, and its value found to be 576 troy (or barley) grains, not 575 grains. The difference is trifling, but enough to emphasize the fact that it is exactly one-tenth of the troy pound. On each face are 22 impressions of the same stamp, arranged in different ways, and therefore in this case probably ornamental. The decimal division of the pound is found in Republican Rome, but there the pound was 5760 and the ounce 576 wheat grains, four of which are equivalent to three barley or troy grains.² However, I can find no evidence that the above hint has ever been taken in order to explain the weight-system of our pagan forefathers in England. For this purpose let it be supposed that the troy pound, which is not named before the fifteenth century, was divided in two ways. In the tables G stands for grammes of 15.4 grains, and an asterisk distinguishes weights that exactly agree with the standard.

SUGGESTED DIVISIONS OF THE TROY POUND

1 lb. troy of 5760 grains	= 12 oz. of 480 grains
1 oz. of 31.1 G	= 10 units (48 grains or 3.11 G)

and

1 lb. troy of 5760 grains	= 10 Grove Ferry weights
Grove Ferry weight (37.3 G)	= 12 units of 3.11 G

It is true that Mr. Wilfrid Airy, in a paper on the ancient weights of Britain,³ deduced from his own list of weights that 'in

¹ *Vierteljahrsschrift für Social- und Wirtschaftsgeschichte* (Leipzig, 1903), vol. i, 'On the early currencies of the German tribes.'

² Sir William Ridgeway, *Origin of Metallic Currency and Weight Standards*, p. 181.

³ *Minutes of Proc. Inst. of Civil Engineers*, vol. cxci, part 1 (1912-13).

the time of the Saxons the troy pound was subdivided decimally, and that troy ounces were used as well'; but in dealing with the money-changers' weights of Kent he does not seem to have adopted that principle. On the contrary, he remarks that 'some of the weights are marked with dots punched upon them, but these appear to be private marks of individual money-changers, and not in accordance with any recognized system: most of the weights do not conform to any recognized system of the period'.

Three sets of weights from graves in Kent are presumably of the same date as other graves in the same cemeteries, which are apparently 6th-7th century. There are fortunately marks on some of these weights giving a clue to their standard; and in the following tables I have followed this clue and obtained a unit which seems to explain nearly all the rest. The lists, therefore, speak for themselves, and all the recorded weights are given in each case, whether they agree with the presumed standard or not. In the right column is given in grammes the weight that seems to have been intended and is in most cases very nearly approached. The marks on the specimens indicated are generally small dots punched in the upper surface, in some cases deliberate cuts on the face or edge of the coin or other piece of metal used.

SARRE, KENT.

Anglo-Saxon unit of 3.1 G:

Grains	Value	G	Standard
1063	22 units	68.8	68.42
320	marked 7	20.73	21.77
300	6 units	19.43	18.66
296	"	19.18	18.66
248	marked 5	16.07	15.55
190	4 units	12.31	12.44
146	3 "	9.46	9.33
140	"	9.07	9.33
96	2 "	6.22*	6.22
94	"	6.09	6.22
51	1 "	3.30	3.11
46	"	2.98	3.11
19		1.23	
18		1.16	
17		1.10	
16	$\frac{1}{3}$ unit	1.03*	1.03
11	$\frac{1}{4}$ "	0.71	0.77
8	$\frac{1}{6}$ "	0.51*	0.51
8	"	0.51*	0.51

This list is taken from John Brent's account of the find in *Archaeologia Cantiana*, vi, 161-2, and contains two marked specimens,

one being a gramme below the standard and the other half a gramme above. On the principle of averages the two weights classified as of unit value are also instructive, and are distinguished by an asterisk as their average conforms exactly to the standard. Three of the four others so marked are exact fractions of the unit. The item of 146 grains is explained by Mr. Seebohm as three Kentish scillings of 3.15 G, the scilling being equivalent to two tremisses of the higher standard of 1.575 G; but he regarded the whole list as mysterious, as it implied that two sorts of solidi were current at the same time.

OZINGELL, KENT.

Anglo-Saxon unit of 3.1 G:

Grains	Value	G	Standard
391	8 units	25.33	24.8
341	7 "	22.06	21.7
292	marked 6	18.92	18.6
243	marked 5	15.74	15.5
145	marked 3 and 1	9.3*	9.3
145	3 units	9.3*	9.3
100	2 "	6.47	6.2
33	11 siliquae	2.13	
27	9 "	1.74	
26		1.68	
19		1.23	
18	6 "	1.16	
15	5 "	0.97	
12	$\frac{1}{4}$ unit	0.77*	0.77

The above weights are illustrated in Roach Smith's *Collectanea Antiqua*, iii, pl. IV, pp. 12-15, and three of them agree exactly with the unit proposed. That bearing 3 dots is exact, and another with 6 cuts is only 4 grains out. Apart from the exact quarter-unit the smaller denominations are not easy to explain on the same system, and may be multiples of the siliqua (carat) of 3 barley or 4 wheat grains, as Mr. Seebohm suggested,¹ that weight being of the full imperial standard of 0.195 G. The proposed Anglo-Saxon unit would contain 16 of these siliquae, and it may be found necessary to add this lower denomination to the first table given above. Two weights, however, remain unexplained, and the coin of Justinian shows that the deposit is later than 627. Dr. Brøgger² regards the unit of 3.15 G, deduced from the three marked weights, as a denar or drachm reduced from 4 to 3 scripula.

¹ *Op. cit.*, p. 183.² *Ærtog og Øre: den gamle norske vægt*, pp. 74-6: noticed in *Antiquaries Journal*, i, 351.

GILTON, KENT.

Anglo-Saxon unit of 3.1 G:

Grains	Value	G	Standard
931	20 units	60.45	62.0
555	12 "	35.95	37.2
225	marked 5	14.57	15.5
144	3 units	9.33*	9.3
46.5	1 "	3.01	3.1

Solidus as unit (4.35 G):

312	marked 5	20.21	21.75
310	5 solidi	20.08	21.75
210	marked 3	13.60	13.05
125	2 solidi	8.09	8.7
124	marked 2 and NB	8.03	8.7
31	$\frac{1}{2}$ solidus	2.00	2.17
30	"	1.94	2.17

Tremissis as unit: $\frac{1}{3}$ solidus = 1.45 G:

180	marked 8	11.66*	11.6
87	4 tremisses	5.63	5.8
62	3 "	4.01	4.35
45	2 "	2.91*	2.9
19	1 "	1.23	1.45

The Gilton series is the most complicated, and the weights are taken from Faussett's *Inventorium Sepulchrale*, p. 23, pl. XVII, where all are illustrated. In the first section the exact standard is attained in one case, but the marked specimen is one gramme under weight. A clue to the meaning of the rest is given by a Byzantine weight marked with two dots on the back, and bearing on the face the usual letters for two solidi ($\nu\omicron\mu\iota\sigma\mu\alpha\tau\alpha\ \beta'$).¹ The weight adopted for the solidus here is nearly the heaviest (70 grains) of the reign of Tiberius Constantine (574-82), who was approximately contemporary with the deposit. The tremissis was a third of the solidus, and as the weight with eight markings exactly answers to the standard adopted in the table, a second correspondence clinches the argument for a solidus of 4.35 G or 67 grains; but another interpretation of the whole table must here be noticed.

Mr. Seebohm (*op. cit.*, p. 181) deduced from this set a solidus between 4 and 4.05 G; but the average of the three marked

¹ Two so marked in the British Museum weigh 135 and 138 grains (8.74 and 8.94 G): nos. 442 and 443 in Mr. Dalton's *Catalogue of Early Christian Antiquities*. The units deduced from heavier marked weights in the catalogue vary considerably.

weights is 4.18 G, and a choice has to be made between the solidus (4.09 G or 21 siliquae of 0.195 G) and tremissis (7 siliquae) of Justin II (566-78), and Mauritius (582-602) on the one hand, and the maximum values under Tiberius Constantine given above. According to Mr. Seebohm, nearly all the gold tremisses found in Kent are of the former standard, nominally 1.36 G, which would make three out of five items in this section of the table overweight. Dr. Brøgger has divided the weight 11.66 G by 4 instead of 8 as marked, and deduced the same unit as that given by the 14.57 G weight marked 5.

It may be thought rash to apply the same standard to weights found outside England or even beyond the limits of the Kentish kingdom; and there is little reason to suppose that the same system of weights was in use among the Anglo-Saxons and their chief enemies from Scandinavia, especially as the *øre* and *ertog* of the Vikings have long been recognized; but something will be gained by bringing an Irish and a Scottish find under discussion, whatever the merits of the present theory. The former comes from a purely Norse cemetery, and is made more difficult by the incomplete condition of some of the weights. It will be observed that correspondence with the standard is in no case absolute, and that both the Grove Ferry weight and the ounce of 10 units are represented in both the following series. The weights (incorrectly given in *Proc. R. Irish Academy*, x (1866-9), p. 18) are those kindly supplied by our Fellows Mr. E. C. R. Armstrong and Mr. Alexander Curle (to Dr. Brøgger). Both sets date from the Viking period, but their copious decoration is clearly Irish, and altogether only three items approach the Scandinavian *øre* of about 26 G. The ship-burial at Kiloran Bay, Colonsay, is described by our Hon. Fellow Dr. Shetelig, in the *Saga-book of the Viking Club*, v, 172, and referred to the beginning of the tenth century.

ISLAND BRIDGE, DUBLIN.

Anglo-Saxon unit of 3.1 G:

Grains	Value	G	Standard
1850	36 units	119.85	111.9
1545	3 oz.	100.104	93.3
1221	2½ oz.	79.12	77.7
954	2 oz.	61.85	62.2
631	13 uni's	40.9	40.3
533	11 "	34.5	34.2
456	10 "	29.5	31.1
413	9 "	26.8	27.9
393	8 "	25.46	24.8
218	5 "	14.126	15.5

COLONSAY, ARGYLLSHIRE.

Grains	Value	G	Standard
2000	4 oz. troy	129.6	124.4
1014	2 "	65.73	62.2
1193	24 units	77.32	74.6
764	16 "	49.56	49.76
572	12 "	37.11	37.3
398	8 "	25.81	24.88
199	4 "	12.94	12.44

There are a few stray weights referable to the Anglo-Saxon period, but without any detailed history. Some are not readily explained by this or any other system, but four now in Canterbury museum are of importance, as they are probably all of local origin and two are the first rubbed Roman coins known to come from graves at Grove Ferry itself. It is by the kindness of the Curator, Mr. H. T. Mead, that I am able to give these details.

WEIGHTS AT CANTERBURY.

Grains	Value	G	Standard
379	8 units	24.6	24.8
280	6 "	18.14	18.6
24.5	$\frac{1}{2}$ unit	1.59	1.55
165	$\frac{2}{3}$ oz.	10.69	10.36

Quite distinct from the Roman system, of which many examples have been found in Britain, are several weights accurately determined by Mr. Airy and referred by him to the troy standard, the pound of which system he identifies with that of Charlemagne (late eighth century). He quotes, for instance, from Silchester in Reading museum, a weight 1.7 grains over the lb. troy and three others, which point to a decimal division of that pound (two of them being two-tenths and one eight-tenths, within a small margin); and he might have included, besides the Grove Ferry specimen, one from the Roman camp of Melandra, Derbyshire,¹ with a fleur-de-lis design on top, weighing 574 grains = 37.18 G, also an ornamented weight from Mildenhall, Suffolk, of 3810 grains = 247.4 G, only 30 grains short of 8 oz. troy (248.8 G).² He found that Charlemagne's coins dating 768-81 had an average weight of 19.7 grains = 1.28 G, but those of 781-814 averaged 24.5 grains = 1.59 G, evidently of the new standard.

¹ *Melandra Castle*, edited by Professor Conway (Manchester, 1906), p. 113, fig. 1.

² *V. C. H. Suffolk*, i, 345.

At 240 to the pound, these would give a value of 5880 grains = 381 G, whereas numismatic authorities have arrived at a pound of 5664 grains = 367 G. Whatever the significance of these figures, it seems that the troy pound, divided decimally, was in use in England two centuries before Charlemagne's reform.

Mr. Airy's enthusiasm for the subject led him to strike an average for the weights of the Anglo-Saxon penny in various reigns, from Egbert to Eadward II. Beginning at 19.71 grains, it rose gradually to 24.21 grains in Eadward the Elder's time, and then sank gradually to 20.71 (Eadred onwards); which, in his opinion, proved that the reformed standard of Charlemagne was not adopted in England till a century later. But it is dangerous to deduce a weight system from the coinage; the modern sovereign, for instance, of 123 grains, has no obvious relation to the table of troy weight. It is, however, curious that the coins of Eadward the Elder and Athelstan should be so nearly half the Anglo-Saxon unit deduced from weights of the pagan period.

A curious analogy can be cited from abroad. From a comprehensive survey of Norse gold-finds of the Migration period, Johs. Bøe¹ has concluded that the *øre* was then about 28 grammes and the *ertog* 9.3 grammes, the latter being the original unit of the system and equivalent to two gold solidi. Those coins were imported into Norway largely in the latter part of the sixth century, and weighed on the average 4.55 G; what more natural than to use a uniform gold coin to weigh bullion that then existed in some quantity?

Without venturing on further speculation as to the connexion between weights and currency, I may quote in conclusion from Sir William Ridgeway's *Origin of Metallic Currency and Weight Standards*, p. 385: 'The solidus was divided into thirds or tremisses . . . and was regarded simply as a sextula or one-sixth of the uncia. . . . The tremissis therefore weighed 24 grains troy, or 32 wheat grains. When the barbarian conquerors of the Roman Empire began to coin silver, they took as their model the gold tremissis. In the earliest stage of the Anglo-Saxon mintage we find so-called gold pennies of 24 gr. occasionally appearing. These are nothing else than tremisses. But silver henceforward was to form for centuries the staple currency of western Europe, and the silver penny of 24 gr. (whence came our pennyweight) became virtually the unit of account. As its weight shows, the penny was based on the gold tremissis.'

¹ *Bergens Museums Aarbok*, 1920-I, pp. 54, 66; *Antiquaries Journal*, ii, 413.

DISCUSSION

The PRESIDENT said it was disappointing to find that if Mr. Smith had made any rash statements, there was no one to point them out. The more light was thrown on the standards of the second five centuries of the Christian era, the better would the history of the time be understood. There were facts of a peculiar order to be studied, and many pitfalls to be avoided; but a certain degree of caution had been shown in the paper. He was not competent to discuss the facts, but thought that the inquiry had a direct bearing on Anglo-Saxon history.

The Age of Stonehenge

Deduced from the Orientation of its Axis

By E. HERBERT STONE, F.S.A.

IN the year 1901 Sir Norman Lockyer made some instrumental observations at Stonehenge with a view to determining the angle of obliquity of the ecliptic which would cause midsummer sunrise to take place at a point on the horizon on the line of the axis of the structure.

The results were presented by him in a paper read before the Royal Society on 21st October 1901, and published in that Society's *Proceedings*, vol. lxix (1901), pp. 137-47.

In his valuable work, *Ancient Britain and the Invasions of Julius Caesar* (1907), Dr. Rice Holmes delivered himself of a sweeping criticism of this work of Sir Norman Lockyer.

In the *Nineteenth Century and After* for January 1922 was published an article by the present writer in which the nature of the problem is defined, the methods adopted by Sir Norman Lockyer described, and the adverse criticisms thereon by Dr. Rice Holmes noticed.

The article in the *Nineteenth Century* was, however, somewhat incomplete without explanatory diagrams. These, by the courtesy of the Royal Anthropological Institute, were published in *Man* for August 1922.

This was followed (in the number of *Man* for September) by a very interesting article by Rear-Admiral Boyle T. Somerville, in which the problem is ably discussed and the difficulties of its solution duly set forth.

The writer's reply to Admiral Somerville's article is published in the number of *Man* for November 1922.

In the October number of the *Antiquaries Journal* Dr. Rice Holmes refers to the writer's article in the *Nineteenth Century* (January 1922) and proceeds to a further discussion of the subject. The remarks made by Dr. Rice Holmes in this paper and in his work *Ancient Britain* appear to call for some consideration.

The work for which Sir Norman Lockyer was responsible was limited to the determination of the angle of obliquity of the

ecliptic which would cause midsummer sunrise to take place at Stonehenge at a point on the horizon on the line of the axis.

For this purpose it was necessary to ascertain, by instrumental observation on the ground, the azimuth of the axis, the altitude of the horizon, and the latitude. The results obtained were as follows :

Azimuth of axis	.	.	.	49°	34'	18"
Altitude of horizon	.	.	.		35'	30"
Latitude	.	.	.	51°	10'	42"

With these data the obliquity of the ecliptic to cause midsummer sunrise to take place on the line of the axis could be determined by any competent computer. Sir Norman Lockyer found this angle of obliquity to be $23^{\circ} 54' 30''$.

By Stockwell's Tables (which were referred to by Lockyer) the date corresponding with this obliquity is given as about 1680 B.C. Stockwell's Tables were, however, published fifty years ago (1873). Since then the rate of decrease in the obliquity of the ecliptic has been determined with greater precision ; and, according to more recent computations, the date for an obliquity of $23^{\circ} 54' 30''$ (and consequently for Stonehenge axis sunrise) is found to be about 1840 B.C.

It will be observed that the degree of accuracy in the result thus arrived at is entirely dependent on the instrumental observations for the determination of the azimuth of the axis, the altitude of the horizon, and the latitude.

The determination of the azimuth of the axis presented difficulties which are fully discussed by the writer in his article in the *Nineteenth Century* (January 1922). The conclusion arrived at is that the axis adopted by Sir Norman Lockyer probably represents the intention of the builders with quite as much accuracy as they were able to attain in setting out the work.

It is, however, obvious, from the conditions of the problem, that only an approximate solution is obtainable. We must, therefore, allow a margin to cover such sources of error as may be considered reasonable by expert authority. Our 'expert authority' for this purpose should be fully qualified to deal with the astronomical questions involved, and should also be well acquainted with the physical conditions to be considered on the ground.

In the circumstances can Dr. Rice Holmes be held to be an expert authority ? and, if so, can we suppose that he knew more about the subject than Sir Norman Lockyer ?

Sir Norman Lockyer (who was presumably fully conversant with the possible sources of error) was of opinion that the total

error, due to all causes, might perhaps affect the date by as much as 200 years—earlier or later.

For the determination of the alignment of the axis of Stonehenge directed to the point on the horizon of the midsummer sunrise, Dr. Rice Holmes supposes that we must assume that the builders were able to calculate the *date* at which this phenomenon would occur. This supposition is set forth in his *Ancient Briain* (pp. 216 and 473-4) and is repeated in his article in the *Antiquaries Journal* (October 1922, pp. 345-6). The writer ventures to think that Dr. Rice Holmes here reveals an entire misconception of the elementary conditions of the problem.

For the purpose of marking on the ground the alignment for the axis of Stonehenge, the prehistoric builders had no occasion for dates or calendars.

For countless generations the Neolithic dwellers on Salisbury Plain must have been familiar with the fact that (viewed from any fixed position) there was a definite point on the horizon which marked the extreme northern limit of the summer sunrise. They would observe that every year the sunrise would reach this point in its annual travel, and—having reached this limit—would afterwards gradually return.

This very remarkable point must have been well known and observed year after year. It may, indeed, have been believed to have some religious significance—the point which the sun-god could *not pass*.

It would be a very simple matter to set up a pole on the Lark Hill horizon to mark the position of this important and well-known point—the limit of the sun's travel—as viewed from the site of the proposed building at Stonehenge. The builders would then direct the centre line (or axis) of their new structure to that point, and thereby secure a permanent record of the azimuth of the midsummer sunrise at that date.

It is clear, therefore, that the determination of the alignment of the axis of Stonehenge must have been a very simple matter, involving no astronomical knowledge or calculation of date. To set up a pole (or a stone) on the Lark Hill horizon to mark the extreme limit of the sun's annual travel would evidently be well within the capacity of Neolithic (or even of Palaeolithic) man.

Dr. Rice Holmes asks (*Antiquaries Journal*, October 1922, pp. 347-8):

'What, one would like to know, does Mr. Stone mean by the word "produced"? He cannot mean that the avenue was continued

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over hill and dale till it struck the place of the bench-mark on Sidbury Hill.'

Dr. Rice Holmes has apparently overlooked the fact that in the article in the *Nineteenth Century* there is no suggestion that the *Avenue* was at any time extended to Sidbury Hill. The words in the original (see p. 107) are as follows :

'It appears that the axis-line had at some time and for some purpose, now unknown, been produced to Sidbury Hill, the site of a prehistoric fortified post situated eight miles from Stonehenge to the north-east.'

The subject of this supposed prolongation of the axis-line is discussed in the *Nineteenth Century* article on pp. 107, 112, and 113, and the writer knows no more about the matter than is there stated.

The Ordnance Survey Department determined the azimuth of this line as $49^{\circ} 34' 18''$, and this was adopted by Lockyer for the purpose of his calculations.

It may be considered not improbable that a stone was at some time set up on Sidbury Hill to mark the extension of the axis-line, and this stone may have been adopted by the Survey Department for their bench-mark. But whether this is so or not the writer (who has made some inquiries on the matter) has been unable to determine.

Dr. Rice Holmes, in his *Ancient Britain* (pp. 216 and 473), has some remarks regarding the extension of the axis to Sidbury Hill. These remarks generally appear to show a misunderstanding of the matter, and are sufficiently dealt with in the writer's article in the *Nineteenth Century*.

It may, however, be noted here that the Ordnance Survey azimuth of the Sidbury Hill extension was based on a line thirty times the length of Lockyer's avenue line, and was moreover determined with superior instruments. Lockyer, therefore, adopted the Ordnance Survey azimuth in preference to his own. This, however, had nothing to do with sunrise observations.

In his *Ancient Britain*, p. 217, Dr. Rice Holmes remarks :

[Norman Lockyer] 'assumed that, in order to observe the sunrise, they [the builders] stood at the exact point within the circle at which it was convenient to him to place them.'

Passing by the improper insinuation that Lockyer selected a point which would work in with his own preconceived ideas, we may note that this same 'observation point' has been adopted by every investigator who has studied the subject.

The point obviously must be somewhere on the axis ; and (if there were no difference in the altitude of the horizon) it would not matter in the least, theoretically, what point on the axis was selected. The observer had merely to look along the axis to see the sunrise.

The range for selection along the axis-line is, however, practically restricted by the conditions of the structure. The point must be behind the great trilithon (not in front of it), otherwise there would be no direction. One cannot aim a gun which has no sights. Obviously the most suitable position is just behind, and close to, the great trilithon, and there is apparently no other point reasonably probable.

But even if we could suppose the observer to be stationed considerably farther back, beyond the outer circle altogether, and ten feet outside, the difference in apparent altitude of horizon would not be sufficient to affect the date to any important extent.

On p. 476 of *Ancient Britain* Dr. Rice Holmes remarks :

‘Professor Montelius accepts and endorses Sir Norman Lockyer’s conclusions. . . . Alas, that a great archaeologist should meddle with what he does not understand.’

There is no reason to suppose that Montelius accepted and endorsed Lockyer’s conclusions without understanding the matter. Indeed, from what we know of the ability and thoroughness of this great archaeologist, we may take it for granted that he was quite competent to form a sound opinion on the subject.

We may perhaps, with more justice, apply these remarks of Dr. Rice Holmes to his own case—and, as a fitting conclusion to these notes, we may venture to say : ‘Alas, that an eminent historian should have so meddled with what he did not understand !’

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An Early Palaeolith from the Glacial Till at Sidestrand, Norfolk

By J. REID MOIR

FOR some time past Mr. J. E. Sainty, of Norwich, has subjected the cliffs and the foreshore of the north-east coast of Norfolk to examination, with a view to finding there examples of flint implements. His researches, conducted with much care, have resulted in the finding of many interesting specimens, and, at his request, I now place on record a discovery of considerable importance.

It is now, perhaps, somewhat widely known that numerous flints shaped by human blows have, during the last two or three years, been found upon the Norfolk coast from Bacton north-westward to Sheringham.¹ The finding of these specimens, which are referable to one or other of the strata forming the cliffs in this area, supports the growing opinion that the English palaeolithic implements, like those found upon the continent of Europe, are of interglacial age, and this view is strikingly confirmed by Mr. Sainty's discovery. The cliffs of the north-west coast of Norfolk are composed chiefly of Lower Glacial material of which the First and the Second Tills, and the Contorted Drift, are the principal members. At Sidestrand, where the implement now to be described was found, the cliff section exhibits about 30 ft. of glacial clay, which, judging from a sample sent to me by Mr. Sainty, I should have little hesitation in referring to one of the Tills—probably to the First. The specimen was discovered lying upon its flat under-surface (fig. 1 B), and firmly embedded in Boulder Clay at the foot of the cliff, which passed directly into, and was apparently part of, the underlying mass.

When Mr. Sainty arrived at the spot the sea was washing over the Boulder Clay, and had, it appeared, just exposed part of the implement which, by reason of its glossy black surface, attracted his attention. The specimen contains, in its interstices, material which, in appearance, is identical with the matrix of the Boulder Clay, of which Mr. Sainty has sent me a sample, and with which I am intimately familiar. Further, the colour of the flake-scars of the flint is precisely similar to that of the broken surfaces of

¹ *Proc. Prehist. Soc. East Anglia*, vol. iii, 219-243; *Journ. Roy. Anthr. Inst.*, vol. li (1921), 385-418.

many flints in the Till at Sidestrand, and this implement can be referred, with the highest degree of probability, to either the First or to the Second Till. The Sidestrand specimen, which is illustrated in four views (figs. 1 A, 1 B, 1 C, and 1 D), is a hand-axe of Early Palaeolithic form, and exhibits, upon its flaked surfaces, neither incipient cones of percussion, nor striae, nor signs of rolling by water action. The implement is somewhat flatter upon one face (fig. 1 B) than upon the other, and its flaked edges have, in places, been modified by the removal of a number of small flakes.

The occurrence of this specimen in Boulder Clay, a deposit composed solely of *derived* material, makes it certain that the

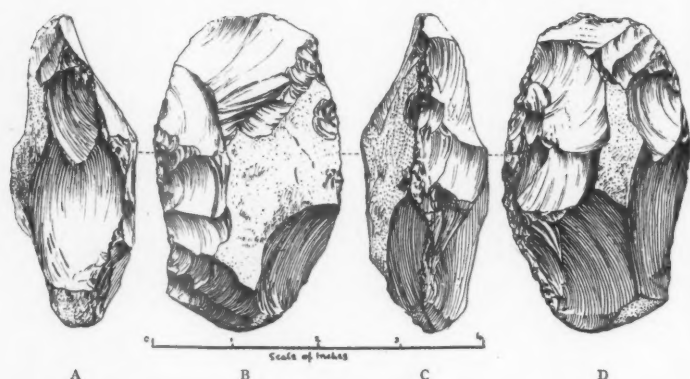


FIG. 1. Four views of early palaeolith from the Glacial Till at Sidestrand.

land surface, upon which the implement originally lay, must be looked for in some deposit more ancient than the Till at Sidestrand. Examination of the Cromer Forest Bed immediately underlying the Lower Glacial deposits of the Norfolk coast has shown me that flints, exhibiting flake-scars of the same colour as those of Mr. Sainty's specimen, occur freely in the Upper Fresh-water Bed (the highest division of the Cromer Forest Bed series), and it seems to me very probable that the implement originally belonged to this deposit. I have already published my opinion¹ that the Early Palaeolithic implements are, with much likelihood of accuracy, to be referred to the Cromer Forest Bed strata, which afford the only evidence in East Anglia of the warm climate prevailing in Early Palaeolithic times, and possibly representing

¹ *Geol. Mag.*, vol. lvii, no. 671, May 1920.

the *Glünz-Mindel* interglacial epoch. The suggested occurrence of Early Palaeolithic flint implements in what most English geologists regard as Upper Pliocene deposits may appear to some unusual, but it must be remembered that the majority of French geologists place the Cromer Forest Bed in the succeeding Pleistocene epoch. But, whichever title is correct, the fact remains that, by his discovery at Sidestrand, Mr. Sainty has provided us with definite evidence that the manufacture of Early Chellean hand-axes was begun in what is now East Anglia, before the arrival of the glaciers responsible for the deposition of our Lower Glacial beds.

I have to record my thanks to Mr. E. T. Lingwood for his kindness in providing the drawings for the illustrations, and to Mr. Sainty, who, with scientific generosity, has presented the Sidestrand implement to the Ipswich Museum—where it will soon be available for examination.

Two Irish Bronze-Age Finds containing rings

By E. C. R. ARMSTRONG, F.S.A.

BOTH finds belong to the latest portion of the Irish Bronze Age, Montelius's fifth period (1150-800 B.C.). The first was recently acquired by the Royal Irish Academy. The circumstances of its discovery are obscure; no more definite information being obtainable than that the objects were dug up near an old ruined castle in co. Westmeath about the month of January, 1922. It includes a bronze socketed celt, and twenty-four complete and one imperfect cast bronze rings. The objects are well covered with an agreeable grey-green patina, with the exception of one ring which was scraped clean, presumably to see of what metal it was composed. The looped axe-head is of characteristic Irish type with oval mouth and broad cutting edge. A little below the mouth it is ornamented with a raised band, the mouth being similarly encircled. The largest ring, which has an external diameter of 4.3 inches, is hollow; the remainder have been cast solid. The illustration (pl. XIII) will dispense with a detailed description of the various rings.

The second find (pl. XIV) has been in the Academy's collection for many years. It consists of two small penannular gold ornaments with disc attachments; five complete, and twelve fragments of cast bronze rings of various sizes. The gold penannular objects have been previously illustrated,¹ but not the bronze rings, the find not having been published as a whole. All were found when ploughing a field situated near Scotstown, co. Monaghan.

The gold penannular ornaments have striated hoops, and a small section of cross-hatched ornament at the ring-ends where these join the inclined flat discs. They respectively weigh 8 dwt. 4 gr., and 7 dwt. 23 gr. The bronze rings vary in size, the largest (imperfect) having a diameter of 3.8 inches. One complete example is pierced transversely. All are covered with a smooth olive-green patina.

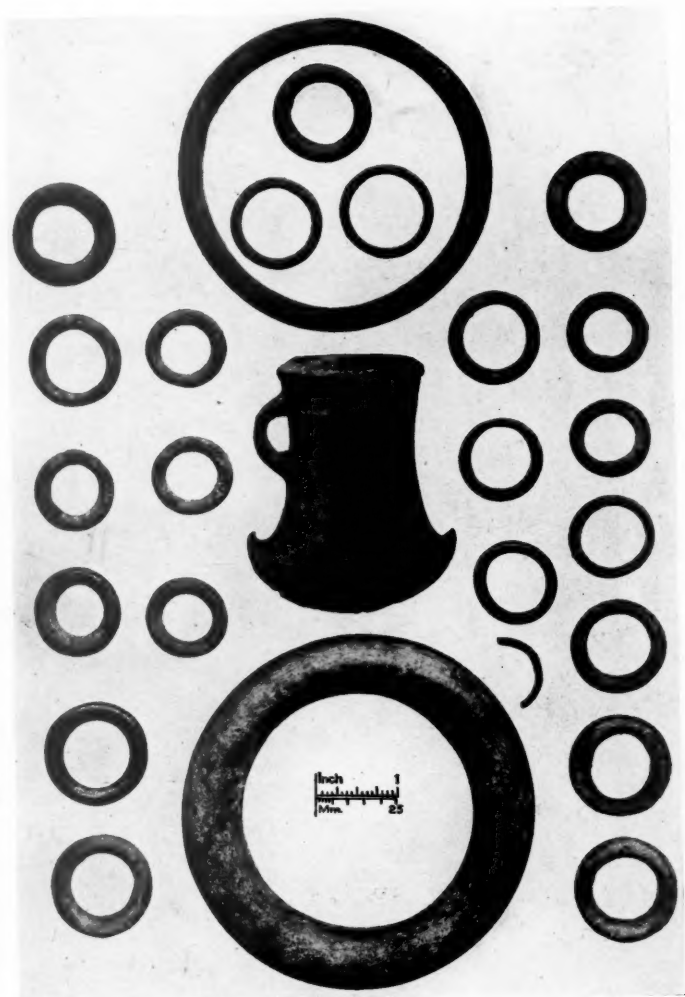
Bronze rings of various sizes are common in Ireland; occasionally they are associated with other objects, as at Brockagh, co. Westmeath, where a bronze ring with cup-shaped ends accompanied twenty-two rings, of which two were conjoined.²

Such rings may have been used for various purposes; the larger possibly as personal ornaments, the smaller, as suggested by Evans, for connecting straps or accoutrements.³

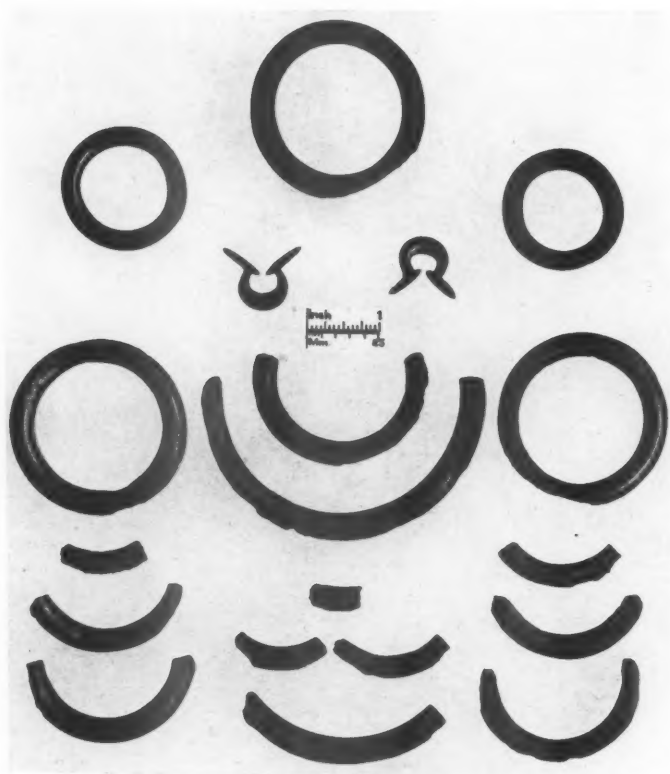
¹ Armstrong, *Catalogue of Gold Ornaments*, pl. xiv, nos. 148, 153.

² Armstrong, *Proc. Royal Irish Academy*, xxxvi, sec. C. pp. 144, 145.

³ *Bronze Implements*, 1881, p. 389.



Bronze celt and rings from co. Westmeath.



Gold ornaments and bronze rings from Scotstown, co. Monaghan.

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Two Flint Celts from Dorset

By REV. H. G. O. KENDALL, M.A., F.S.A.

By the kindness of Captain Carlson, of Clifton, I have been able to make drawings of a pair of celts which came into his possession soon after I had initiated him into the mysteries of prehistoric flint implements. The smaller, and in my opinion undoubtedly the older, of the two, is ground and polished at the cutting-end; and the ground surface becomes narrower as it extends along the middle of each face for the greater part of the length (fig. 1).

It is a moot point whether such specimens are partially ground, or first wholly ground and then re-chipped. In this particular instance there is evidence to show that the implement was, in its original form, ground over the whole of its surface, though the facets were not completely obliterated. The still visible facets are smooth and lustrous. There is no sharp break between them and the more perfectly ground surface.

The chipping, which removed certain other facets, however, along a space from about a quarter to a half of the distance from the cutting-edge to the butt, has left facets with sharper edge and ridges. These impinge upon, and have broken through, the ground and polished surface. This chipping has, moreover, cut away parts of the original sides of the celt, thus giving it, as it were, a waist where it could either be mounted in a split stick or a withy, or, more likely, be held in the hand, the thumb and forefinger of the right hand obtaining a hold at this part.

The polished part is dirty white, and the re-chipped facets are a harder and cleaner white than those partially ground. The re-chipping was done either in the same period as the original chipping and grinding, or, more likely, in the next succeeding one.

The two faces are equally convex. The chipping and the outline of the implement are reminiscent of some Cissbury specimens. The original work is probably at least as old as the Cissbury implements. This celt bears the closest resemblance to



FIG. 1. Flint celt from Dorset ($\frac{1}{2}$).

one in my collection from Windmill Hill, Avebury, in all respects, save that the latter has one less convex face.

Special interest attaches to Dr. Carlson's two celts, for the one described bears on its label the legend: 'Flint celt, used as a chisel, found at Tollard Royal, Dorset, May 1894.'

The other has on it: 'Flint celt, used as a chisel or hammer-head, found at Tollard Royal, Dorset, near the Hand-in-Hand public house on General Pitt-Rivers' property, May 1894.'

This latter (fig. 2) is a splendid specimen of a chipped celt.

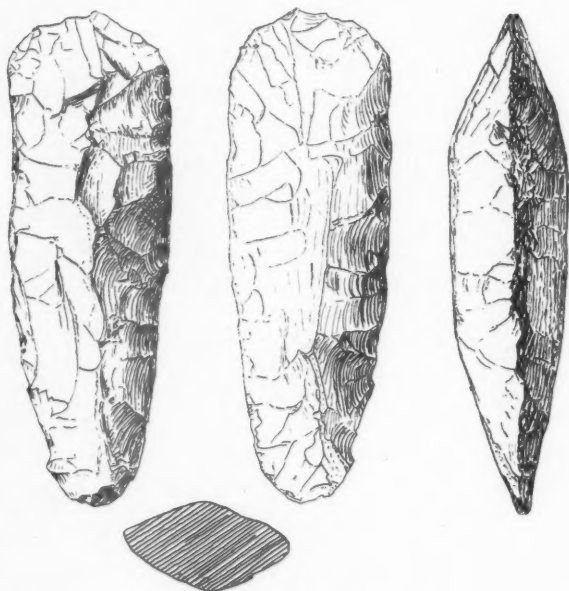


FIG. 2. Flint celt from Dorset ($\frac{1}{2}$).

Like the foregoing, it has both faces equally convex. There appears to be no sign of any grinding; but the ridges are rather smooth, as though through some gentle friction. The facets are flatter, narrower, and longer than, at any rate, the later ones on the other celt. The side-edges are almost straight, as they were originally in the celt first described. The chipping is very carefully, and sometimes almost minutely done. A single, small, modern fracture has made more prominent an obtuse point at the cutting-end. It is noteworthy that the implement cannot (at any rate in its latest prehistoric condition) have been useful for chopping as a

mounted axe ; and a portion of the edge has rather the appearance of having been used for scraping or planing, by use in the hand. A number of chipped celts, when carefully examined, can be seen to be unsuitable for use as mounted axe- or adze-heads ; whereas a portion of the edge, and that the more highly finished part, can be used when the implement is held in the hand. This fact was commented on in my paper on Avebury and Grime's Graves in *Proc. Soc. Ant.* xxxi, 85.

The implement is of grey flint ; small portions of the crust remain on one face ; and the central part is dull and of impure material. There is a little blue patination around the patches of crust. In type and condition the implement approximates to a late series from North Wilts. and elsewhere. It may be Early Iron Age, or not earlier than Late Bronze Age ; and, in any case, is distinctly less old than the other celt.

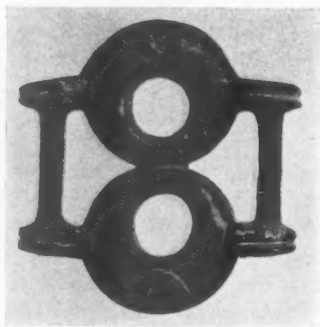
The condition of the side-edge, just above the little point near the butt, suggests that it has been used there for scraping. The slight projection of one half of one side beyond the other half is apparently due to the toughness and badness of the material along the projecting part. It could not there be chipped away any further with safety. Both specimens bear a little iron stain on their surfaces.

Since these specimens came to my notice, Mr. R. A. Smith has added, by his article in the current number of *Archaeologia*, to his valuable contributions on the dating of English Neoliths. The numerous instances of re-chipped celts in the Avebury district have caused me, for years past, to maintain the probability that these were re-used, very frequently as raw material for obtaining flakes, &c., by Early Bronze Age man.

Mr. Smith shows strong reason for thinking that this is the case. And I may anticipate publication of my excavations at Windmill Hill to say that from the (Early) Bronze Age layer was taken, in August last, a piece of a polished celt, plainly utilized as a core. Portions of the sides remain, and are not squared but rounded off. The thickness was evidently considerable in proportion to the width, and one face was more convex than the other.

Re-chipped pieces of polished celts occur, somewhat sparingly, in the prism or core-scraper industries of this district. There are reasons for thinking that the latter are Late Bronze Age and Early Iron Age. These pieces have precisely the same patination as the chipped tools of the earlier of these two industries, and may have been made at that time and re-chipped in the later period. It is plain, from circumstances of finding, condition, and

technique, that chipped celts were manufactured in both these prism industries. As a general rule they may be distinguished from Neolithic specimens, not only by patina, but also by greater rudeness and clumsiness of manufacture. The celt, though utilized, was not the implement of the period. Roughness of make, however, will not be found in every specimen. As in other prehistoric problems, a series must be considered in order to arrive at such a conclusion. The larger celt from Tollard Royal is, probably, one of the better specimens dating from one of these two late periods. Similarly, by no means all Neolithic chipped celts are made with regularity. Greater evenness is found too on the earlier series, from Cissbury and allied stations, than on the later, namely the Grime's Graves and parallel industries. There is a strong tendency for chipped celts of the Late Bronze and Early Iron Ages (if such they be) to show the greatest thickness near the cutting-edge (see *Proc. Prehist. Soc. East Anglia*, vol. iii, article on Scraper-core industries in N. Wilts., especially pp. 529, 530).



Bronze link from Sussex ($\frac{1}{2}$).

See p. 144.

Notes

The mapping of Long-barrows.—Statistical work is none too popular with British archaeologists, but the Ordnance Survey has set a good example in publishing information with regard to Long-barrows and Stone-circles in the Cotswolds and Welsh marches, with a layered map on the $\frac{1}{4}$ in. scale, measuring 27 in. by 18 in., on which all the sites are marked by symbols. There are also two plates giving plans of barrows and their stone-chambers, from out-of-the-way sources or from recent measurements in the field. This is no. 6 in the new series of Professional Papers, and part 1 of 'Notes on archaeological information incorporated in the Ordnance Survey Maps', dealing with sheet 8 of the $\frac{1}{4}$ in. map; and has been compiled by the Archaeology Officer of the Survey, our Fellow Mr. O. G. S. Crawford. The monuments included in the list number 77, distributed over nine counties; and it reflects great credit on the Survey that no less than 22 additions have been made to those mapped in previous editions. Three pages of introduction furnish definitions of the principal terms in order to secure uniformity in future surveys; and attention is drawn to the fact that Neolithic man avoided the highest ridges of the Cotswolds, about 70 per cent. of the monuments being between 500 and 750 ft. above sea-level; but on the other hand two of the three Long-barrows in Monmouthshire (at 100 and 140 ft. O. D.) show that he did not always avoid the lowlands, which must have been densely wooded in his day.

Pit-dwellings in Sussex.—Further excavations on the Downs at Park Brow near Cissbury by Messrs. Wolseley and Pullen-Burry have been recorded by Mr. H. S. Toms in the *Sussex Daily News* of 27 November last. Fifteen pits have been located in an area 400 ft. by 200 ft. on the crest of the hill and emptied to the chalk-bottom, where in some cases holes have been found as if intended to support a roof-tree. Animal bones, burnt flints, and pottery fragments were found in abundance, the last resembling early La Tène ware from the Marne, with a few pieces suggesting a still earlier date; and in view of other local discoveries a Hallstatt occupation is not excluded. Two triangular 'loom-weights' of clay, and a bone comb supposed to have been used in weaving, are evidence of a textile industry, and charred wheat confirms the view that cereals were then being cultivated. The only object of iron is a pin 2 in. long, bowed in the middle and looped at the end, of a recognized type; but the work is by no means finished, and further spade-work may be rewarded by sensational discoveries.

An early British bronze from Sussex.—Rabbits were partly responsible for the discovery last autumn of a bronze connecting link for the belt resembling that found with a cordoned vase at Letchworth garden-city in 1913. The latter is illustrated in *Proc. Soc. Ant.* xxvi, 240, and preserved in the local museum. Dr. G. W. Eustace's find

on the downs near Arundel is in excellent condition, with a fine green patina all over; and consists of two rings placed vertically and pierced eccentrically, in one piece with the two columns to which strap-ends about $\frac{3}{4}$ in. wide would be attached. It was no doubt worn as an ornament at the back, and shows in relief, above and below, the vesica-form that appears later in the trumpet-pattern of Ireland.¹ The photograph is full size and saves further description; but mention may be made of a third example from the Glastonbury Lake-village (pl. XLIV; E 262, in Messrs. Bulleid and Gray's first volume). The first century B.C. is therefore the probable date of all three; and search is being made on the spot for other relics of the period.

Surface implements from Wiltshire.—The accompanying drawings illustrate, in three views each, two flint implements found by our

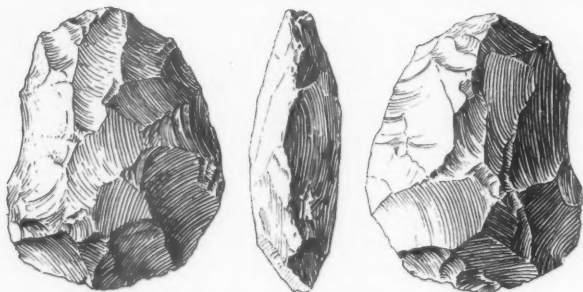


FIG. 1. Flint implement from Fovant, Wilts. ($\frac{2}{3}$).



FIG. 2. Flint implement from Fovant, Wilts. ($\frac{2}{3}$).

Fellow Rev. G. H. Engleheart on the surface of arable land in the Upper Greensand area at Fovant, on the Avon, 6 miles south-west of Wilton, Wilts. The locality is about 400 ft. O. D. and prolific in flint scrapers and other forms including arrow-heads, which have been assigned without hesitation to the neolithic period; but these two

¹ See illustration on p. 142.

are exceptional and probably much older. The first (fig. 1) is a small ovate implement, not symmetrical, of a brownish-grey frequently seen on Egyptian specimens. The faces are equally convex, the ridges dulled, and the whole lustrous: the side-edges fairly straight but becoming zigzag towards the base; and the top is rather blunt, with secondary working. The length is $2\frac{1}{2}$ in. and greatest breadth 1.9 in., a comparatively small implement that may date from Le Moustier times. The second specimen belongs to a type to which Mr. Reid Moir has drawn attention in this *Journal* (vol. ii, p. 114); and certainly resembles some of the rougher leaf-shaped blades of the early Solutré period. Surface specimens of this type are common in Suffolk and are not necessarily Neolithic because they have not yet been found in a geological deposit. Mr. Engleheart's flint (fig. 2) is dark slate-colour, with fairly sharp edges except at the two ends; but it can hardly have been used as a knife or scraper, much less as a lance-head. In the present state of knowledge it is enough to put it on record and suggest a date.

The Hampshire gravels.—Prehistoric research is hindered by the prevailing uncertainty as to the date and origin of gravel spreads in south-east England containing Palaeolithic implements. In this respect Hampshire is one of our most prolific counties, and it is gratifying to find geologists studying its deposits in the light of human industry. The high-level gravels at the west end of the Weald near Selborne have been examined by Mr. Henry Bury (*Proc. Geol. Assoc.*, xxxiii, 81), who can find no evidence of man's presence at the time of their deposit; but Mr. R. W. Hooley has plenty of human material in the Bournemouth, New Forest, and Southampton deposits, and gives a map of the Channel river (the predecessor of the English Channel) as well as the limits of the sea's encroachment on Sussex and south Hampshire at three successive stages, before the chalk ridge between Purbeck and the Isle of Wight was broken through. He maintains that the gravels of the plains, from the top of the New Forest to Hill Head on Southampton Water (both sites of Palaeolithic finds), are not river gravels, but were spread out in the Solent Sea during continuous elevation; and the implements were not dropped or lost in river or sea, but have been derived from land. He has found what may be classed as a 'Thames pick' $7\frac{1}{2}$ in. long at the base of 2 ft. of red brick-earth in the cliff half a mile west of Chilton Chine, I.W., and places it at the end of the Palaeolithic period, his survey of the gravels yielding the following classification:—Mindel-Riss interglacial (between St. Acheul and Le Moustier), the gravels of the plains from 355 ft. to 150 ft. O.D. The Portsdown-Goodwood raised beach was then formed during a lull in the elevation of the land (period of Le Moustier), and the Riss glaciation followed. When the extreme cold gave way to an interglacial phase, the gravel sheets of Selsey, Lee on Solent, Hill Head, Lymington, and west of Bournemouth were laid down, most of them teeming with implements. Then the Brighton, Worthing, and Bembridge sea-beaches were formed at 50 ft. O.D., apparently in the Aurignac period; but implements of that type can only be expected in the Coombe-rock and low-level

valley brick-earth, that were the result of the Würm glaciation. The above is a summary of a paper entitled *The History of the drainage of the Hampshire basin and the relation of prehistoric Man to that History*, printed in the Hampshire Field Club's 9th volume, which also contains an inventory of stone implements recently discovered in Hampshire, with good illustrations of thirty-two specimens (*The Antiquity of Man in Hampshire*, by O. G. S. Crawford, J. R. Ellaway, and G. W. Willis). The results of patient and careful collecting are here placed on permanent record.

The Tardenois Period.—Now that the Hiatus-theory is discredited, a gradual transition from Palaeolithic to Neolithic culture has to be demonstrated, and a good deal of attention is now being given to the phase named after La Fère-en-Tardenois, near Rheims. Mr. Francis Buckley has been finding not only pygmy flints but well-developed graving-tools in association on the Yorkshire and Lancashire moors; and Dr. de Saint-Périer contributes to the Sept.-Oct. number of *Revue Anthropologique* a paper on the Tardenois graver (le Burin tardenoisien). After enumerating the characteristics of this minute implement, he suggests that it was hafted for use by means of resin or some other adhesive; but does not explain how the pressure necessary for engraving could have been exerted without breaking the flint. Here and elsewhere these gravers are sometimes less than half an inch in length, and the dressing of the edge almost microscopic; but the type is constant, and cannot have been made without a purpose, which was common to many contemporary peoples in three continents. The best known site in Lincolnshire is by no means exhausted, and further developments may be shortly expected.

International Geological Congress, 1922.—Mr. Henry Dewey sends the following note on prehistoric topics discussed at Brussels last August. Numerous papers were read on the correspondence of deposits at various levels in the Mediterranean basin, in the European river-valleys and on the Atlantic coast, with the phases of palaeolithic culture. MM. de Lamothe, Depéret, and Gignoux have been led by their researches in the western Mediterranean to a new classification of the Quaternary based on changes in sea-level. Four stages, each consisting of a complete sedimentary cycle, have been recognized, and named by M. Depéret in chronological order: the Sicilian, the Milazzo (N. Sicily), the Tyrrhenian, and the Monastir (Tunis) levels. They correspond to strand-lines at 99-100, 55-60, 28-32, and 18-20 metres respectively above sea-level. There is also a lower strand-line at 7-8 metres, and all stages are represented along the African coast of the Atlantic as well as in Europe. There was a corresponding lowering of the river-valleys, in stages, or terraces. These four terraces, described by General de Lamothe, on the Isser, the Moselle, and the Rhine, have been observed in other river-valleys bordering the Mediterranean and the Atlantic; and in M. Depéret's opinion are closely related to the four glacial periods recognized in the Alps and the north of Europe. The terrace at 18-20 m. appears to be connected

with the moraine of the Würm glaciation; the 30 m. terrace with the Riss moraine; the 55-60 m. terrace with the Mindel, and the 100 m. terrace very probably with the Günz moraine. The interglacial phases correspond with the lower part of each terrace in the fluvio-glacial areas.

The following inferences are drawn by M. Depéret:—

1. There is no trace of the existence of Man in the Sicilian and Milazzo terraces.

2. The Chelles epoch of primitive amygdaloid implements, accompanied by remains of a warm fauna, corresponds to the base of the 30 m. or Tyrrhenian terrace; whilst the St. Acheul industry, with developed amygdaloid implements and a fauna both warm and cold, is found in the upper part of the same terrace.

3. The industry of Le Moustier is found associated with a cold fauna in the Monastir or 18-20 m. terrace, but in the south of Europe a warm fauna everywhere accompanies this industry.

4. M. Mayet has demonstrated that the latest Aurignac industry with a cold fauna is intercalated, at the rock-shelter of La Colombière (Ain), in the deposits of the highest parts of the same terrace.

5. Finally at the time of La Madeleine the valleys had been cut down to their present level; and he concludes that more than half the Quaternary period had passed before Man made his appearance.

M. W. Kilian showed that the fluvio-glacial terraces of the French Alps corresponded to those described above.

Prehistoric Site at Waddon, Croydon.—Mrs. C. J. Richardson reports the discovery of a prehistoric site at Waddon, a hamlet in Croydon. The site is actually in Beddington parish, but adjoins the boundary between that parish and Croydon. It is on rising ground close to the Wandle, at the north end of Aldwyk Road, an unfinished road which cuts through a sandy hill overlooking the Wandle. Much soil on each side of the road has been removed, and the resulting hollow shows in section two or three feet of sandy soil resting on an irregular surface of Thanet sand. Attention was drawn to the site by numerous worked flints, which appeared to have come from the surface soil, and some digging at a promising spot resulted in the discovery of a definite hearth at a depth of two feet, resting on the Thanet sand. The hearth consisted of a mass of burnt flints, among which were fragments of coarse, hand-made pottery, bones and teeth of animals, and flint flakes. The animals represented are horse, ox, sheep, pig, and red deer. Near the hearth, but at a slightly higher level, were found fragments of blackish wheel-made pottery, said by Mr. Reginald Smith to be 'British'. Broken pottery was found at all levels in the surface soil, and appears to be of various periods from Neolithic to Roman.

A fairly constant level of flint flakes and cores was found at the junction of the Thanet sand with the surface soil. These were iron stained and encrusted with sand, and probably represent the oldest industry of the site. Apart from these the ground seemed to have been much disturbed all over, and it was difficult, if not impossible, to distinguish between different layers. Worked flints were found at all levels, and include cores of different types, scrapers and trimmed flakes,

a good burin, and two 'pygmy' implements. Many of the flints found appear to resemble Aurignacian types, notably a beautiful end scraper found by Mr. Prescott Row on a site not far from the hearth. Mr. Row has also found fragments of a cinerary urn, hand-made and of coarse pottery, which have been partly pieced together and appear to belong to a vessel of Roman type. Mr. Reginald Smith is inclined to put this down as a native attempt to copy a Roman sepulchral urn.

There is a marked similarity between this habitation site and one found by Mrs. J. E. Birch at Wallington, both in their situation on the left bank of the Wandle and in the general character of the remains discovered.

Early Iron Age Site at Braintree, Essex.—The Rev. G. Montagu Benton, Local Secretary for Essex, sends the following: About four years ago, Mr. F. A. Hunnabell, of 'Selbannuh', London Road, Braintree, began digging for gravel in the field behind his house, and within the past three years fragments of pottery have, from time to time, been thrown up by the diggers; other fragments were also met with when the house was built in 1907. During March of last year an early form of cooking-pot (height 8 in.), of a rather coarse brownish ware, with bead rim, and a broad band of fine grooves on the shoulder, was found in a pit filled with black earth. Mr. A. G. Wright, curator of the Colchester Museum, tells me that this type of vessel is of pre-Claudian date, and occurs on Augustan sites in the Rhineland, e.g. at Haltern. The foot of a pedestalled urn, and portions of a 'Belgic' platter with flat base-ring, were also found with the pot. Shortly afterwards the men came across a V-shaped trench containing a good deal of fragmentary pottery. Mr. George Morris, B.Sc., of Saffron Walden, and I visited the site on 12th April 1922, and discovered that this trench, which extended some distance, was about 1 ft. below the surface soil, and had a total depth of about 40 in., and a width ranging from $6\frac{1}{2}$ ft. at mouth to 2 ft. at base. It was filled with disturbed gravel mixed with a certain amount of humus; and fragments of charcoal occurred here and there at the bottom of the trench, and were also associated with the pottery. In spite of rain we were able, with the owner's kind permission, to do a little excavating, and brought to light among other pottery fragments—all of which were apparently of pre-Claudian date—portions of a large pot, with broad shallow cordon on the shoulder. It is hoped that further excavation may be possible. A detailed report, with illustrations, will appear in the *Transactions of the Essex Archaeological Society*.

In 1921 Mr. J. Boyton discovered in the garden at the back of his house, which is situated about 250 yards north-east of the present site, four or five more or less perfect pots, but unfortunately these were totally destroyed to make up a path!

Fragmentary pottery of a similar type, collected by the late Rev. J. W. Kenworthy at Braintree, presumably in the neighbourhood of London Road, is in the Colchester Museum, where may also be seen a cordoned urn, with cover, and other early Iron Age pottery, discovered in 1903 near Skitts Hill, which is about a mile to the east of the site in question.

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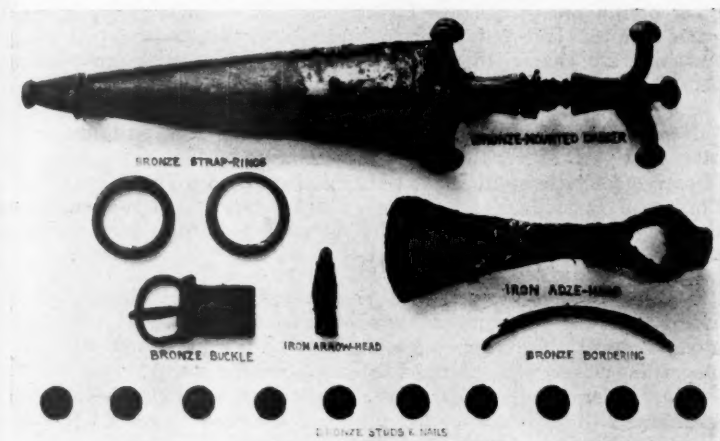
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Some recent finds on Ham Hill, South Somerset.—Dr. R. Hensleigh Walter, F.S.A., Local Secretary for Somerset, forwards the following report :

Early in the year a cremation pit-burial was unearthed—probably Belgic—of La Tène II period, *circa* 200 B.C.

At a depth of about 2 ft. 6 in., under a thin layer of clay, relics, which had apparently been deposited on the hot ashes, were found lying embedded in blackened soil containing fragments of charcoal and burnt bone. The sides and bottom of the pit were whitened by an admixture of a chalky substance. Neither clay nor chalk is native to this soil.

The relics include: (1) an iron dagger (L. 11.75 in.), in bronze sheath, the front of which is tinned. The bronze hilt, which is a prototype of that of the 'anthropoid' sword, is mounted on the iron tang. In the



Objects from a cremation burial on Ham Hill (about 3).

centre of the grip are the remains of an ornamental boss, made up apparently of alternate discs of shale and another substance which has perished; (2) bronze buckle (L. 2.2 in.); (3) two bronze rings (ext. diam. 1.5 in.); (4) a number of flat-topped bronze studs and nails, together with some dome-headed bronze nails; (5) iron arrow-head (L. 1.6 in.) with hammered-over socket; (6) iron adze-head (L. 5.75 in.), in which a portion of the charred wooden handle remained, and part of an iron sickle; (7) fragment of curved bronze bordering, semicircular in cross-section; (8) numerous fragments of plain and decorated Late-Celtic pottery.

On an adjacent site, which had yielded in previous years relics of the first century A.D., were recently found four coins of interest, dating the early Roman occupation of the site, viz.:—(1) *As* of Augustus, struck by Sextus Nonius Quinctilianus, 6 B.C., countermarked by Tiberius; (2) *As* of Antonia (wife of Drusus Senior); (3) *As* of Germanicus,

struck by Caligula, A.D. 37-38, countermarked by Claudius; (4) *As* of Claudius: also the bow of a bronze *AVCISSA* brooch (L. 1.3 in.), with name in relief, somewhat smaller than the one previously found here.

Several ovoid baked-clay sling-bullets were also found, some bearing traces of bitumen on their surface. This may afford an explanation of the account which Caesar (*De Bello Gall.* v, 43) gives of the Nervii, in an attack on Cicero's camp, setting fire to the thatch of the huts by discharging red-hot sling-bullets. It is improbable that these, if heated to redness and discharged, would retain sufficient heat during their flight to set fire to thatch, whereas if dipped in bitumen while hot, and ignited, they might do so.

On other sites were found (1) a bronze hinge-pin brooch (L. 1.15 in.), representing a well-modelled fallow deer in which the 'dappling' and other points are picked out in red enamel; (2) a bronze hinge-pin brooch, tinned (L. 1.5 in.), representing a bird with outstretched wings, on which are enamelled studs; (3) a finely patinated bronze forceps (L. 3.8 in.), with closed ring-handle (int. diam. 0.8 in.), similar to an implement used in silk-weaving at the present day, known as a 'picker'.

Near the surface on another site a fourteenth-century bronze spur came to light. This is of interest as relating to the period when the Manor and Castle of Stoke-sub-Hamdon were owned by Lords of the Barony of Beauchamp of Hache. Lord John, second of that name, was knighted in 1306 by Edward I, who had previously paid a visit to the Castle at Stoke.

Roman Villa at Keynsham, Somerset.—Mr. A. Bulleid, F.S.A., Local Secretary for Somerset, sends the following note: Last August a small local committee (of which Mr. J. E. Pritchard, F.S.A., is chairman) was formed of those interested in the Roman villa situated in Keynsham cemetery near Bath. An appeal for funds having been issued and liberally responded to, the committee were able to begin digging on 11th September. Work was carried on for four weeks, when, owing to unfavourable weather and the lateness of the season, it was decided to close the excavations until May or June this year.

The cemetery consists of two parts, the older now occupied by graves, and an extension which is as yet only slightly disturbed by burials. Although during the past forty years grave-digging has undoubtedly destroyed many foundations and probably pavements, the recent excavations have shown there are considerable portions of the villa remaining. As yet there is insufficient evidence of the plan of the villa, or the area of ground it covered, but as the excavations have disclosed the foundations of a corridor 10 ft. in width by 200 ft. in length, we may safely surmise the dwelling was a large and important one. The villa was built on sloping ground at the foot of a hill overlooking the Avon valley with an easterly aspect. In order to attain the requisite floor levels, the corridor had two flights of four steps. Arranged along the northern side of this passage was a series of living rooms, one of which with its tessellated pavement is now covered by the cemetery chapel. The corridor runs east and west, the lower or eastern half is paved with square stone slabs, the western

part with tesserae. The designs of the tessellated pavements so far have been purely geometric, and not elaborate, panels of guilloche pattern in red, white, and blue being the chief feature.

Situated at the west end of the corridor are the foundations of two important rooms (as yet incompletely examined); one is probably pentagonal in shape, the other has an apsidal end, and both are paved with tesserae. Other foundations exist to the south of these which will probably lead to further discoveries of rooms or passages.

The 'finds' so far have not been particularly interesting, but the following may be mentioned: a great many stone roofing-tiles, hypocaust flue-tiles, the stones of two rounded arches, pieces of carved stone belonging to a cornice, and fragments of variously coloured wall plaster. The smaller objects include: sixteen Roman coins of late third or early fourth century date, parts of two crucibles, one half of a small baked clay mould for casting a pendant or some ornament, a complete bone pin and portions of others, part of a bronze bracelet, and a large quantity of coarse pottery in fragments.

The examination of the foundations of the recently discovered Roman villa at the site of Messrs. J. S. Fry's new factory and Garden City on Keynsham Hams is in abeyance. This is the second villa at Keynsham, and is situated about one mile east of the cemetery. If we may judge by the coins, pottery, and other Roman antiquities collected during the digging of the gravel beds in an adjoining field, this dwelling will prove to be both interesting and productive.

The Deities of Hadrian's Wall.—Apart from the Roman pantheon, there were many strange cults among the frontier troops in Britain from the second to the fourth centuries, and a suggestive paper on the subject was contributed by Lt.-Col. Spain of the Black Gate Museum, Newcastle-on-Tyne, to the December number of the *Cornhill Magazine*. In course of time Celtic deities became popular with the foreign levies who guarded the frontier against the Picts; and many were associated, or even identified, with the greater gods of Rome. An underground temple to Mithras was found at Housesteads, but no definite inscription relating to Christianity has come to light in the neighbourhood of the Wall. The identification of native deities is rendered more difficult by the arbitrary or defective spelling of their names; but the author has hopes of solving some of the problems with the help of philologists; and himself recognizes a battle-god in the root Cad. Another group seems to give the root-words Lat, Let, and Lit, which he connects with Elathan of the Pedigree evolved from the early writings, traditions, and folk-lore of Ireland, Scotland, and Wales. This table is reproduced, and a goodly company of Celtic deities shown to be descended from Anu, the universal Mother of the Tuatha de Danaan, and Domna of the Abyss.

Roman Cemetery at Slack, Yorks.—Mr. I. A. Richmond sends the following report:—The construction of a tennis-court at Outlane near Huddersfield brought to light last January three graves belonging to the cemetery of the Roman fort at Slack. The graves lie just north of the main Roman road of pre-Hadrianic age between York and

Chester, which passed through the north-west annexe of the fort. They also lie about two hundred feet beyond the suggested south-western boundary of the annexe. Two graves produced nothing; the third contained bones and a well-levigated urn of grey rustic ware, about six inches high, which may well belong to the time of Trajan. The discoveries give a first clue to the site of the cemetery of the fort: they also suggest that its gravestones have been robbed and that it had reached quite large proportions by the opening years of the second century. The finds will be placed in the Tolson Memorial Museum at Huddersfield.

A Roman Burial at Radnage, Bucks.—Mr. C. O. Skilbeck, F.S.A., Local Secretary for Bucks., reports the discovery of a Roman burial in unusual circumstances. Some weeks ago the neck of a Roman earthenware pitcher was brought to him. This, together with the body of the pitcher, had been turned up whilst re-laying a carriage drive immediately in front of a modern house, at Sprigg's Alley—on the Radnage side of Chinnor Hill—a few yards on the inner side of the Bucks.-Oxon. boundary. On proceeding to the spot it was found that the rest of the pitcher was very fairly perfect: the whole vessel being about $14\frac{1}{2}$ in. high and $10\frac{1}{2}$ in. in diameter. It was undoubtedly Roman of a first or second century type. The excavation was something under three feet in depth, in stiff clay mixed with flints. The next specimen which came up, and which was extracted from the clay with some difficulty, was a pillar-moulded glass bowl of blue-and-white mottled pattern, about 7 in. in diameter and $2\frac{1}{2}$ in. high. This bowl was very nearly perfect, having only one small hole—whether done during the excavation or not it was impossible to say. Beside this bowl was an amber-coloured glass jug with thin neck and handle, the sides fluted, and the handle ornamented. It was a good deal shattered, but as nearly all the fragments were found it should be possible to put it together.

Owing to the nature of the soil and the very bad weather digging was carried on with much difficulty, and the next object found seemed to have suffered considerably from water, and possibly rough usage. This appeared to have been an oak box, the size of which it was impossible to ascertain, but it would apparently have been about 2 ft. long and 1 ft. broad. It seemed to have been covered entirely with iron bands on which were a bead ornamentation, bronze studs in the form of lions' faces at intervals, and round ring handles, of which about a dozen were discovered. Two bronze drop-handles with acorn ends, a large bronze ornamental hasp, the remains of the lock, together with a bronze stud having a radiating pattern of green and red enamel, were also found associated with the box. There were also a small ring, to which was attached a key, and what appeared to be the remains of a globular bell.

From the markings on the rust of the iron plates it would appear that the box had been wrapped in coarse linen or canvas, and the discovery of some fragments of burnt bones suggested that these had been contained in the box.

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them, and nine Samian bowls and plates of different dimensions, arranged along one side of the box apparently, were the extent of the find. So much water was then in the ground that the red pottery bowls were as soft as putty and most difficult to extract.

The relics point to a Roman interment of the beginning of the second century, and it is remarkable that there are no other Roman remains in the neighbourhood and that the grave is on a high ridge, some two miles east of the Icknield Way, at about 700 feet above sea-level. The most careful investigations in the immediate neighbourhood have so far failed to bring to light the smallest signs of building or of any other interment.

The owner of the property on which the discovery was made (W. Gordon Ross, Esq.) will eventually present the whole find to the British Museum.

Discoveries at Newport Pagnell, Bucks.—Mr. F. W. Bull, F.S.A., Local Secretary for Bucks., sends the following note: Advantage was taken of the dry summer of 1921 to deepen a pond in a field off the North Crawley road in the parish of Newport Pagnell, Bucks. (numbered 202 on the Ordnance Survey 1900, second edition). In the course of the work the occupier, Mr. Alfred Bullard, noticed that a quantity of bones and fragments of pottery was being thrown out, and on examination found that the fragments were on the whole small, though some were of a good size, but no whole vessels were discovered. The designs, some fifty in number, were very varied, and though the date of most of the pottery was pre-Roman, there were some Roman pieces. One good flint arrow-head was found, and the remains of animal bones were numerous. The fragments of two upright wooden stakes, about 3 or 4 ft. high and 6 in. in diameter, were found about 8 ft. apart in the mud at the bottom of the pond, and gave rise to a conjecture that they were the supports for the roof of a pit-dwelling.

The field is some three-quarters of a mile to the east of the Anglo-Saxon cemetery found in 1899 by Mr. Bullard.

Roman Remains at Haversham, Bucks.—Mr. Bull also communicates the following: At the close of 1921, while an arable field known as Haversham Hill field in the parish of Haversham, Bucks., was being ploughed, the lower part of a skeleton was unearthed. The bones had evidently been disturbed from time to time in ploughing, the ground being on a slope, and there was nothing to indicate their date. It is worth noting, however, that another skeleton was found in this field many years ago, and that Roman coins have been found both there and in another field across the road in Little Linford parish, known as Haversham Hole. Four of the coins, which are in the possession of Mr. John Souster, the owner of the first-named field, are of Claudius Gothicus, Constans, Valens, and Constantine the Great. The skeleton may be no more than the remains of a gipsy, gipsies having been in the habit years ago of camping in this field, but the coins are interesting in view of other Roman finds which have been made in Haversham from time to time.

Excavations at Repton Priory, Derbyshire.—Mr. H. Vassall, F.S.A., Local Secretary for Derbyshire, sends the following note: Gilbert Thatcher, son of the original grantee of the Augustinian priory at Repton, pulled down the priory church and all the cloistral buildings except the west wing, the inner slype, and some of the outer walls on the east and the north sides. The west wing was saved from demolition by the offer of Sir John Porte's executors to buy it for the purpose of founding Repton School in 1557. It has been used as a school-house ever since, but in 1921 it was decided to remove the boys into a new boarding-house and, as part of the School War Memorial, to restore the priory as far as possible to the state in which it was when purchased in 1557.

All the modern buildings which encumbered the cloister garth and the site of the refectory have now been removed, together with 3 ft. of soil over all in order to reach the level of the cloister walks, of which some of the original paving stones were found inside the eastern processional doorway from the church. The cloister walks have been paved and the garth covered with turf. Partitions have been removed from inside the west wing, and most of the undercroft of the prior's guest hall has thereby been brought to light with some of the original Norman pillars and massive beams of oak. The most interesting things that have been uncovered are two courses of the north aisle wall with considerably higher fragments at each end; a curious chamber (with thirteenth-century vaulting voussoirs lying on the floor, and a doorway and splayed window to the north) under the east end of the refectory, parallel to the slype to the infirmary; some fragments of the inner wall of the cloister walks with some square-headed pieces of fifteenth-century window tracery lying just below them; the garderobe of the prior's chamber in the seven-foot south wall of the west wing; a fair number of encaustic and incised tiles from the canons' tile-kiln, and of Swithland slates from Charnwood Forest; a novices' nine-men's-morris stone from the west walk of the cloister, and a great many human bones from the most unlikely places, such as the outer slype and the undercrofts of the great Hall and of the refectory.

The doorway of the chapter house, which had been preserved elsewhere, has been put back into its original position.

A full account of the priory by Mr. A. Hamilton Thompson, F.S.A., will appear in the 1922 volume of the Derbyshire Archaeological and Natural History Society.

A supposed Tournay Font at Boulge, Suffolk.—Canon J. T. Fowler, D.C.L., F.S.A., sends the following note: This font has not hitherto been particularly noticed or described, so far as I am aware. I believe it to belong to the small group of fonts shown by the late Dean Kitchin to have been originally connected with Tournay in Belgium, and to be of date about 1150-70 (*Fourn. Brit. Arch. Assoc.* 1 (1894), 6). The black marble of which they are made is quarried at Tournay, whence the fonts themselves are supposed to have come. All are at places not far from seaports or navigable rivers. Those at Winchester and Lincoln cathedrals are probably the best known examples in England. There are others of the same type in the neighbourhood of Tournay.

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The bowls are externally square, supported on central pillars, and usually having smaller pillars under the four corners. They are sculptured on the four sides with scriptural, legendary, or symbolical subjects, but all these have been carefully chipped off the Boulge font, and it does not appear to have had corner pillars. It is sufficiently large, though much smaller than some. There are some remains of characteristic ornament still remaining, and shown in the photograph, which has been taken by Mr. W. R. Weatherley, of Woodbridge. The Rev. R. Fetzner Taylor, of Grundisburgh House, called my attention to the font four or five years ago. As it is now unpolished, it



Font at Boulge, Suffolk.

presents a grey appearance. The material is a black marble, not 'basalt', as sometimes stated.

There appear to be traces of fastenings for the cover on the top, which, like the sides, has been chipped down.

The principal dimensions are as follows: height of base, $8\frac{1}{2}$ in.; of shaft, 1 ft. 8 in.; of bowl, $11\frac{1}{2}$ in. Total, 3 ft. 4 in. Diameter of base, 2 ft. 4 in.; circumference of shaft, 4 ft. $7\frac{1}{2}$ in.; diameter of bowl, external, 2 ft. 7 in.; of basin, 2 ft. $0\frac{1}{8}$ in. at top; depth, 10 in.

Restoration of the Old Glass at Meopham Church, Kent.—The Vicar, the Rev. G. A. Tait, forwards the following note by Mr. Golding-Bird: Remains of the old glass, dating from the fourteenth and fifteenth centuries, have been most carefully and artistically arranged in the best

way possible by Messrs. Powell, of Whitefriars Glass Works, without the addition of a single piece of new glass.

With the exception of four figures at the top and of three quatrefoils at the bottom of the three lancets, it has not been found possible to follow any orderly pattern; yet the various broken fragments of glass have been so arranged as to form, on the whole, a very pleasing effect.

The following is a description of the more recognizable portions; but the odd pieces dotted about everywhere each provide a study for the archaeologist. Starting from the east or left-hand side, the four top panels contain: (1) a figure of St. George, helmeted, and holding his shield with the Cross upon it; (2) St. Thomas of Canterbury, a figure which at one time was thought to be that of Simon de Mephram, but this is disproved by two circumstances: one, that he wears a corona signifying canonization; and the other that there is in Farningham Church an almost identical figure, about which there has apparently never been any doubt of its representing St. Thomas of Canterbury; (3) St. Catherine, with her wheel; (4) is a composite panel containing three heads, the middle one being beautifully drawn. Whom they represent it is not possible to say.

In the three large lancets the following can be traced. The first or left hand is, in its upper third, largely composed of fragments, but in the right-hand lower corner is part of a figure of the devil. In the middle third is a disc with 'Ladie' on it: it is completed in the last lancets by a similar disc, inscribed with the word 'Helpe'. These are known to have been in the east window as late as the year 1854. The lower third has a perfectly arranged quatrefoil in blue and red, the only regular pattern that could be made out of the old glass. Similar quatrefoils are seen in the other two lancets.

The middle lancet shows in its upper third a panel representing an angel blowing a trumpet, and the head of another angel, of most sorrowful countenance, below. Curious spike-like rays shoot across this panel, the meaning of which is not clear. In the middle third is a draped figure, but without a head, and bearing a palm branch in the right hand: very suggestive of the angel of the Annunciation. Below this is a single inset which shows a half-draped leg. The lower third has the quatrefoil mentioned above, and in the lower left-hand corner is a curious fragment of a finger and thumb holding a plectrum or striker, with which the strings of a harp or similar musical instrument are being sounded.

The third lancet shows in its upper third the figure of a smooth-faced saint with halo—possibly St. John—and on either side is a head with curly golden hair: these are probably the heads of angels. Below this is the body and arm of a figure, with the remains of flowing hair descending on the shoulders, possibly representing St. John the Baptist. The rest of this lancet is similar to the above.

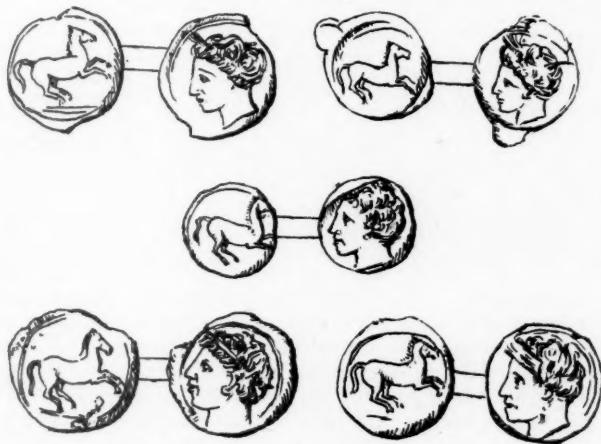
It is impossible to speak of the many individual small fragments, though each deserves a careful study, but in the trefoil at the top of the middle lancet are two very good representations of the Tudor Rose. The plain white diamonds of glass that fill in the interstices, and the short memorial inscription below, are the only new glass employed in this window.

It is evident that we have here only a very small portion of the coloured glass originally in the church; nor is it known in which windows it was placed. There is a record, however, that in 1846 there was coloured glass in the east window, and some must have been in the Perpendicular windows of the nave, since the figures of St. Catherine and St. Thomas exactly filled the small panels of the present window without any alteration.

Formation of a Civic Society at Rochester.—Mr. R. Cooke, Local Secretary for Kent, reports that there has recently been formed in Rochester a society the purpose of which is the preservation of all objects of beauty and of historical and archaeological interest, and to prevent vandalism.

Discovery of remains of the Carmelite Friary, Nottingham.—Mr. R. W. Goulding, F.S.A., Local Secretary for Nottinghamshire, reports that towards the end of January a portion of fourteenth-century walling belonging to the Carmelite Friary was discovered. It is a characteristic piece of masonry of Gedling stone. Several broken tiles were also found, one of which bore the arms of Archbishop Zouche of York. Some fragments of worked stone of the fourteenth century, a stone roofing-tile, and two complete human skeletons were also discovered.

Treasure Trove of Carthaginian Coins at Malta.—Professor T. Zammit, Local Secretary for Malta, forwards the following note: On



Carthaginian coins from Malta.

the 26th July 1921, whilst cleaning a field of a heap of stones, to the north of Mkabba, a farmer found a clay aryballus full of brass coins. The curator of the Valletta Museum, informed of the find, visited the spot and interviewed the farmer.

The jar, about 4 in. in diameter, and 6 in. high, had been broken and thrown away, but some of the fragments were found, and it was possible to reconstruct the vessel so far as to get a clear idea of its shape and size. The coins were acquired for the Museum. The number of coins was reported by the farmer to have been 300, but only 255 of them were handed to the Museum curator. The weight of the coins is 1,507 grammes, the average weight of each coin being 5.90 grammes. The heaviest coin proved to weigh 7 grammes. The diameter of the coins varies between 14 and 17 millimetres, and their thickness between 4 and 6 millimetres. All the coins are in a good state of preservation, and most of them are covered with a patina; they are all of the same type, but not struck from the same die.

All the coins show on the obverse the head of Persephone to the left, crowned with ears of corn. The reverse has a horse to the right, at a gallop, or raised on its hind legs; in no case is it shown at rest. No palm-tree or other object is in the field. There are no letters in the exergue.

The drawings of the coins were made by Mr. G. Despott.

*Recent Archaeological Work in Italy.*¹—Dr. T. Ashby, F.S.A., forwards the following report: The interest of the discoveries in Italy during the past twelve months has not, perhaps, kept pace with that of preceding years.

It will be noticed that, owing to difficulties of publication in previous years, a number of very out-of-date reports are still appearing.² There is, this year, very little to report in regard to the city of Rome itself.

In regard to the hypogeum in the Viale Manzoni³ I have to note that the study of the upper chamber has since shown that Adam and Eve may be clearly recognized in its damaged paintings. This chamber, we now see, was situated in the base (the only part now preserved) of a lofty brick tomb, once two or three stories high, of a style familiar enough to us on the Via Appia and the Via Latina. This fact inclines me to accept the idea that there was a certain amount of intentional 'camouflage' of the Christian character of the paintings, as I have already pointed out.⁴

The discoveries on Monte Mario, to the north of Rome, on the right bank of the Tiber, appear to have brought to light scanty traces of a settlement of the Bronze Age (no traces of which had hitherto been found in the vicinity); while Etruscan tombs and dwellings belonging to an Etruscan settlement nearer to Rome than any hitherto known may change our ideas as to the history of the early relations between Rome and Etruria. As yet, however, it is unwise to be too positive in our assertions in regard to the historical consequences of these discoveries.⁵ Not very far off an interesting tomb belonging to one

¹ See *Antiquaries Journal*, ii (1922), 65; and *Times Literary Supplement*, 15, 22 Dec. 1921 (pp. 842, 858); 21 Dec. 1922 (p. 858).

² See *Notizie degli Scavi*, passim.

³ Bendinelli in *Not. Scavi*, 1921, 230 (cf. 1920, 123); Paribeni in *Boll. d'Arte*, ser. i, vol. i (1921), 97.

⁴ *Journal of the R.I. B. A.* xxix, no. 18 (19 Aug. 1922), p. 567.

⁵ Cf. Calza in *Art and Archaeology*, xiii (1922), 223.

Octavius Felix, with paintings of the middle of the third century A.D., has come to light.¹

We may now take a brief survey of the principal finds in the rest of Italy, from north to south.

Further excavations made at Populonia in 1920 and 1921 are described.² A considerable number of chambered inhumation tombs of the archaic period was found, all of them originally covered by mounds. One was circular, with an approach passage; the roof was a false dome, formed by the projection of each course of stones beyond the one below it. Two others were of similar construction, but rectangular in plan, with rounded angles.

At Ferento, near Viterbo,³ a tomb of the Republican period with several sarcophagi, with inscriptions of members of the Gens Salvia, was found. They were no doubt ancestors of the Emperor Salvius Otho, whom we know to have been a native of Ferento.

A number of interesting villas has been found in the course of agricultural operations on the northern and western slopes of the Alban Hills.⁴ In one of these villas to the south-west of Albano, in a rectangular hall with an apsidal termination, there was found a colossal statue of Artemis. Remains of an ancient villa have also been found near the great fall at Tivoli: and some further work has been done at Hadrian's Villa, where some interesting baths have been excavated.⁵

At Ostia we may note the discovery of various important inscriptions,⁶ including two cippi erected by the *curatores riparum et alvei Tiberis* of the time of Tiberius, which originally stood on the right bank of the Tiber.⁷ It was not hitherto known that their activities extended so far from the city of Rome itself. They are, too, very important for the light they throw on the ancient course of the Tiber.

A full account of the great horreum has now been published.⁸ The building appears to date from the time of Claudius, to have been reconstructed after the middle of the second century, and to have been further altered under Septimius Severus. Facing the so-called Temple of Vulcan (really the Capitolium) is the site of the ancient Forum; and here have been found fragments of two large statues and of architectural decorations in marble, belonging to a temple, which collapsed, perhaps in consequence of a fire.⁹ Among the sculptures found¹⁰ the

¹ Bendinelli in *Boll. Soc. Arch. Rom.* xiii, 2. The most important represents a group of children in a flowery meadow, with Hermes Psychopompos preceding a car drawn by doves, in which Eros is carrying off the soul of a child who is buried in the tomb.

² Minto in *Not. Scavi*, 1921, 197, 301, and the same author's article in *Atene e Roma*, 1920, 30, and his new work *Populonia*.

³ Zei in *Not. Scavi*, 1921, 217.

⁴ Lugli in *Not. Scavi*, 1921, 263, 385; Mancini, *ibid.*, 275; Bendinelli, *ibid.*, 383.

⁵ Paribeni in *Not. Scavi*, 1922, 234.

⁶ Calza in *Not. Scavi*, 1921, 235.

⁷ The river changed its course very considerably after the great flood of 1557.

⁸ Calza in *Not. Scavi*, 1921, 360.

⁹ *Boll. d'Arte*, ser. ii, vol. i (1921-2), 441.

¹⁰ Calza in *Not. Scavi*, 1922, 87; and in *Boll. d'Arte*, ser. ii, vol. i (1921-2), 395.

most attractive is a delightful Artemis of the Amazon type, with the head of a girl of the Julio-Claudian period.

At the modern Anzio, the ancient Antium, famous for its temple sacred to Fortune, the remains of the only Roman calendar known to us before the reforms of Julius Caesar have been found.¹

At Monteleone important remains of the fortified enceinte of the ancient Hipponium, finely constructed in massive blocks of stone with circular towers and an interesting postern carefully masked by an outer wall and protected by a massive tower, have been brought to light in recent excavations.² Scanty remains of an Ionic temple have also been found, and traces of three other sanctuaries.

A long account of the discoveries of the last ten years at Reggio, Calabria, also appears.³

At Sant' Antioco, in Sardinia, the Christian catacombs which bear the name of the saint, and are situated close to the church which is dedicated to him, have been carefully explored.⁴ They were preceded by a group of Punic tombs, which were utilized and transformed as required. Parallel cases are not lacking in the catacombs of Sicily, to the smaller of which, as to those of Malta, the cemetery of Sant' Antioco is closely akin. The date is in the main the fifth century after Christ.

It will be of special interest to numismatists that a hoard of coins was found near Voghera in 1919, but only about one-third of it has been recovered, consisting of 1,187 specimens, Republican denarii from 217 to 38 B.C.⁵

Another hoard of nearly 700 bronze coins of the Imperial period (Trajan to Gallienus) came to light near Talana in south-eastern Sardinia,⁶ while the largest of all was that of Falerone, consisting of 7,045 billon coins (A.D. 217-67) and 546 bronze coins (A.D. 81-268).⁷ Another hoard from the Marches, that of Montecarotto, consisted of 5,298 pieces.⁸

Attention should be called to the beginning of the archaeological survey of Italy. The first fascicule (17 pp. text, 21 illustrations, 1 map, 1 : 12,500), dealing with a portion of the Via Appia near Terracina, was ready in May last. The description is scrupulously careful, and well illustrated. At the present rate it will take a long time, but it will be well and adequately done.

Fragments of Sculpture recently discovered in the Vatican Basements.—Mrs. Strong, F.S.A., forwards the following: These have already been described by me in *The Times* of 1st July 1922, and in the *Illustrated London News* of 9th Sept. 1922, so that it will be sufficient to enumerate briefly here the principal pieces. They include a head

¹ Mancini in *Not. Scavi*, 1921, 73.

² Orsi in *Not. Scavi*, 1921, 473.

³ *Id. ibid.* 1922, 151.

⁴ Taramelli in *Not. Scavi*, 1921, 142: cf. 1922, 296, for a full report on the shrine at S. Maria della Vittoria.

⁵ Patroni in *Not. Scavi*, 1921, 298; Bonazzi in *Riv. Ital. di Numismatica*, xxxii (ser. ii, vol. ii), 1919.

⁶ Taramelli in *Not. Scavi*, 1921, 499.

⁷ Moretti in *Not. Scavi*, 1921, 179; 1922, 59.

⁸ Ricci in *Riv. Ital. Numism.*, xxvi (1913), 568.

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from a metope of the Parthenon; replicas of the head of the Aristeion, from the group of the Tyrant Slayers; of the head of the Pheidias Anacreon; of that of the Hermes Propylaios of Alcamenes; of the head of Myron's Athena from the group of Athena and Marsyas that stood on the Acropolis at Athens.

Besides these pieces representative of the best Attic art in the first half of the fifth century may be noted a fine head resembling that of the Nike of Olympia, and excellent replicas of the head of the Apollo on the Omphalos; of that of one of the Charites from the group of the sculptor Socrates; of a Sappho corresponding to the portrait of the poetess on the coins of Lesbos; of the so-called Phaon in Madrid; a head from a replica in black basalt of the Idolino.

Praxiteles is represented by a head of Aphrodite—perhaps an original—which stands comparison with the Kaufmann and Petworth Aphrodites, but cannot be pronounced an exact replica of any known work of his; by the head of a youth akin to the Hermes of Olympia and to the Aberdeen head; and by a new variant of the Cnidian Aphrodite in which the vase stands on the ground and the drapery is treated in long, straight, almost archaic folds.

From Lysippus, or rather his School, we note a replica of the head of the bearded Seilenos carrying the infant Dionysos; and that of a dead man from a sepulchral relief. Of the Capitoline Aphrodite, probably the Lysippian version of a Praxitelean work, there is among the Vatican fragments a delicately modelled torso.

From the Hellenistic period come the delightful head of a young female Faun; the group of a child with a bird; a life-like portrait of a young girl; another female head with hair curiously dressed, closely resembling the head placed on a statue of Dionysos at Petworth; a good replica of the lower part of the celebrated Satyr with the foot-clapper. There is also a group of four female heads and a bearded male head resembling the Sarapis of Bryaxis; a fine male head of *neufro* (the volcanic tufa of Etruria) of late Etrusco-Hellenistic style.

Among the reliefs are the stele of a lady with her maid, and the replica (it might be a fragment of the original) of the left-hand portion of the relief of the Muses in the Chigi Palace at Siena; Hellenistic fragments showing a composite divinity armed with sword, trident, and thunderbolt, while an eagle perched on a huge cornucopias fills up the background on the left.

There are besides a number of Greek and Roman portrait heads, mostly of types so far unknown.

The discovery of these antiques is due to the energy of Professor Amelung and to his painstaking researches among veritable rubbish-heaps. The fragments are being gradually arranged in a small new museum.

Archaeology in Palestine.—We are indebted to the Director of the Department of Overseas Trade for the following note: The two principal grottoes at Bir Jibrin have been cleaned out, and strong doors fitted. Some new paintings were uncovered during this work. The interior of the Tomb of Absalom has been cleared and the front of the exterior also, revealing the full height of the pilasters. The

unopened 'tomb' at Arnutich proved on investigation to be a cistern. Interesting rock cuttings in the vicinity were photographed and planned. The tells south of Jisr El Mejamie display all periods, from early Bronze Age to Arab, and the group of settlements is of considerable interest.

The Roman site at Tiberias has been visited, and it has been possible to trace almost completely the walls, which encompass not only the Roman town bordering the lake, but also the Kasr Bint El Malek on the hill behind at some 800 ft. above it. Long stretches of wall are in very fair preservation, and the provision of cisterns even at the highest points is a noteworthy feature. The aqueduct which brought water to the town from a point south-west of Semakh has been traced beyond its northern limit as shown on the map. The Forum of the town is plainly visible, and the columns just to the north of it probably belong to a temple. Ruins of what was almost certainly a theatre have been observed. Examination of the caves in the cliffs above the town showed that their occupation was probably early, though the discovery of a sickle-flint is not proof of Neolithic date.

At El Mejdel a cave radiating chambers, perhaps for burial, was investigated, and a rough plan made.

In the Jiftlik Land, Beisan, arrangements have been made with the Demarcation Commission for the safeguarding of archaeological sites. A number of minor sites in Tiberias and Nazareth Sub-Districts have been visited.

Mr. Aziz Khayat, Haifa, has presented to the Palestine Museum his share of the Iron Age pottery from the tombs on his property which were excavated last September. Mr. Selim Khayat has presented a large limestone head to the Museum.

Reviews

A Manual of Archive Administration: Including the Problems of War Archives and Archive Making. By HILARY JENKINSON, M.A., F.S.A. 10 x 6½; pp. xx + 243. Oxford: at the Clarendon Press. 1922.

This is one of the first volumes of a series on the Economic and Social History of the World War, published on behalf of the Carnegie Endowment for International Peace. The primary purpose and the justification for including such a volume in the series was to furnish a scheme for the management of war archives. The volume could not have been entrusted to better hands, but Mr. Jenkinson soon found it necessary to develop his work into a general treatise applicable to archives of all periods and illustrated from archives of the past. His decision was no doubt sound, for the problems to be decided in dealing with war archives do not differ essentially from those which arise in the case of all archives. As a fortunate result, we have a careful and elaborate treatise dealing with what constitutes archives, how they grew into being and how they should be kept. The whole forms an admirable manual for the guidance of the archivist

in handling the documents entrusted to his care, and in the conclusion the principles arrived at are all applied judgmatically to the preservation of war archives. Much of the book is necessarily of a technical character, and such questions as the proper nature of a repository, the system to be adopted for handling and securing the safe use of documents, the best methods of repair, and the most suitable system of arrangement are carefully dealt with. These problems occupy the first two parts of the book and are followed by two other parts dealing with modern archives and the archive in its making in the original office. Finally we have the application of the principles to the handling of the Archives of the War, which from their complexity and bulk have made the enunciation of a sound method a matter of urgent necessity. Naturally, Mr. Jenkinson's volume does not lend itself to detailed description or criticism, and he will no doubt pardon me if I refer only to some isolated points. He comments justly on the fatal consequences of breaking up documents which originally formed one series, and instances the withdrawal of a letter from its place in the *Cely Correspondence* with the consequent concealment of its true provenance; it might have been noted that Mr. Malden has done his best to rectify an omission for which he was not to blame by printing the letter in the *Transactions of the Royal Historical Society*, 3rd Series, x, 159-65, with a comment which illustrates the evil done by the withdrawal of a document from its proper environment. In treating of the subject of archive-making, Mr. Jenkinson lays down rules to be followed in the registry of an office. Theoretically his rules are sound enough, but it may be doubted whether they are not too elaborate in some respects for practical use. If pushed to their extreme they would be in danger of missing the first purpose of a registry, which is to make the documents quickly and easily available for administrative use. Practical experience teaches that over-elaboration tends to clog the machine, and that the system of registration should be as simple as possible; this simplicity is essential to good administration and will for that reason tend to the making of good archives. Nor can I agree that the destruction of unnecessary documents is a matter for registry; what is important for administrative purposes (and therefore valuable as archives) can only be determined by one who is in fact responsible for the actual administration. But the systematic elimination of purely formal documents is no doubt a mere matter of routine, which might with advantage be enforced in all offices. As regards classes of documents not registered, in my own experience such documents in a modern office were rare and usually not of a character to become archives. But the practice which sprung up in some new offices during the War, of having a separate registry for the head of the office, was administratively bad and is likely to have created confusion in archives. In a series of appendices Mr. Jenkinson deals with various special problems of archive administration. Particular attention may be directed to his suggested rules for transcribing documents, which are very sound. One would be glad to see them generally adopted by all societies concerned with the publication of records and documents.

C. L. KINGSFORD.

The Roman Forts of Templebrough near Rotherham. By THOMAS MAY, M.A., F.S.A., F.S.A. Scot. 11 x 7½; pp. ix + 132, with 61 plates and folding plan. Rotherham: Henry Garnett & Co., Ltd., Effingham St., 1922. 25s. (to be obtained from the Town Clerk, Rotherham).

This publication, the record of a site now lost for ever, represents the author's War work, voluntary as usual. The appearance of the volume, its size, large print, &c., naturally invite comparison with his last production, *The Pottery of Silchester*. But, whereas that was merely a descriptive catalogue of the pottery, this is a complete story, told from prehistoric times and fitted into the general account of the Roman Conquest of Britain.

Romano-British archaeology owes a great debt to Mr. May for rescuing all that could be recorded before the ground was finally occupied for the extension of neighbouring steel-works. This was only rendered possible by the foresight of the Mayor and Corporation of the neighbouring town of Rotherham. They delayed the advance of the steam navy and made themselves responsible for the expenses. It is only fair to add that the intruding firm contributed generously with funds and personal assistance. It was necessary, however, to carry on right through the winter of 1916-17, and that too, owing to the War, with a scarcity of competent labourers.

Mr. May begins by clearing the ground, so to speak, all round Templebrough. He details all the Roman stations and their garrisons within a radius of forty miles. The fort itself lay on the south bank of the Don, twenty-eight miles from the latter's confluence with the Humber. It was directly opposite to the British fort of Vincobank. Attention has recently been drawn by Dr. Wheeler to this juxtaposition of Roman and British forts. He has noted many instances in Wales where they stand frowning at each other.

The name Templebrough (so spelt throughout except on the plan, where it is given as Templeborough) first appears, we are told in a foot-note, on a charter of the thirteenth century. It derives its name from the colonnade and massive walls of the twin granaries bordering on the principal street.

All Mr. May's well-known care and patient labour are shown in his endeavours to work out the plans of the three successive forts and their gateways. The denuded condition of the walls could not be more plainly demonstrated than by the table on p. 21, which shows the amount of prolonged search necessary before satisfactory evidence was obtained as to their position and chronological sequences.

The date A.D. 54 is suggested for the foundation of Fort I, and of all the evidence adduced in support, none is more striking than that of the tile of the IX Legion, which was annihilated in A.D. 61.

The occupation was continuous until the end of Fort II, after which there was a long break, perhaps as much as a century (c. A.D. 170-270), as shown by the accumulation of soil between two road levels. To Fort III are assigned the half-dozen coins from Victorinus to Constantine I, on whose death, in A.D. 337, the place

disappears from history. Noteworthy features of this last fort are its hasty and unmilitary construction, its want of definite plan, and the utilization of old materials. Though occupation was resumed, its military importance must have declined.

Mr. May is not afraid to launch out into an excursus. He often uses some detail as a peg on which to hang general information. Such opportunities occur in his account of the Praetorium, the horreum, the bath buildings, the crucibles, and the leaden weights. He decides in favour of the term Praetorium for the central building as against Principia which really includes other buildings. The horreum leads to a discourse on the Corn Laws, the weights to a list of places where others have been recorded. To these will shortly be added those found by Mr. J. P. Hall at Caer Llugwy, and a beautiful acorn-shaped counterpoise from Richborough. His account of two corn-drying ovens in the granaries and his reference to the quantity of grain shipped from Britain now receive special illustration from the recent publication in *Archaeologia* of Yewden Farm, Hambleden.

Evidence as to coal and iron working leads the writer to draw a striking contrast between 'the primitive and diminutive methods and appliances' of the Romans and those in operation on the same spot at the present day. But, in citing places where iron was worked by the Romans, the site of Ariconium, surely one of the most conspicuous, is omitted. An analysis of iron slag, by Mr. B. Methley, is added. A similar analysis recently obtained from Ariconium also shows how inefficient the Roman furnace was to extract the full value of the metal.

The catalogue of the coins, prepared by Mr. Mill Stephenson, includes an aureus of Titus. The fact that, out of eighty-nine copper coins, as many as fifty-one were illegible to such an expert is eloquent proof of his remark that they were 'much corroded and many absolutely rotten and illegible'. Mr. May's explanation is that the sulphuric acid from the smoke-laden atmosphere has converted the copper into sulphate. These coins, which form two consecutive series, the general collection and a hoard of nineteen denarii, are important as dating the close of the military life of the site (Fort II). The rebellion of the Brigantes in A.D. 158 is suggested (p. 11) as the limit; but it seems doubtful whether the end can be placed quite as early. Each series finishes with a coin of Faustina II. That in the general collection (no. 54, Rev. VENVS) has its obv. legend obliterated. But the hoard specimen (no. 19, Obv. FAVSTINA AVGVSTA) can hardly be earlier than A.D. 161.

The classification of the pottery follows similar lines to those of the Silchester volume. But certain types such as the so-called 'Rhenish' and 'Castor' wares are almost entirely wanting. This is strong confirmation of the coin evidence that Fort II came to an abrupt termination in the latter half of the second century. So, too, the scarcity of exclusively late shapes indicates how slight was the re-occupation (Fort III). When we look to the pottery for corroboration of the pre-Flavian existence of the fort, there is no great amount of it, only a few pieces of Drag. 29 and nos. 189, 190, and 202 in the

coarse wares. But the unusually large proportion of South Gaulish decorated bowls, which has also been remarked at Richborough, requires explanation and may point to a falling off in the trade of that class of ware in post-Trajanic times.

With regard to the plates, many of the reproductions from photographs are, as in *The Pottery of Silchester*, poor and lacking in sharpness. Pl. XXII-XXVII, containing the decorated Sigillata, are faint compared with those of the earlier volume. Pl. XXVIII-XXXV give Mr. May's bold sectional drawings of pottery, including our old friends the plain Sigillata shapes, which, though well known to many, have the merit of making the book more complete and so of saving the trouble of reference elsewhere. Imitations of Sigillata shapes are always of interest, some ten different types being represented on pl. XXIX, including Drag. 27, of which there were ten copies found. As several were wasters, it is evident that they were produced locally.

In the section on the potters' stamps, Mr. May seems rather inclined to give too early a date to some of the potters. Meddilis, for instance, for the details on whose bowl pre-Flavian dates are given, flourished in the Flavian period, and at Wroxeter was twice dated A.D. 80-120. Murranus, though generally considered pre-Flavian, is not exclusively so, for he is expressly stated in *Arch. Ael.* xiii, 283 (Corbridge, 1914), to be 'Flavian, not pre-Flavian'.

Primus is given as A.D. 40-70. But even on the Continent his stamp is found in the later (Flavian) layers at Hofheim and Wiesbaden, while in Britain it is thrice dated after A.D. 80 at Wroxeter, and of late first century at G. P. O. London. Vitalis, A.D. 16-80, is again too early for Britain, when his six stamps at Newstead (A.D. 80-100) and Mr. Lambert's two late first-century pits at G. P. O. are taken into account. The same may be said of the dating of Laxtucissa and Libertus to A.D. 100. Libertus was found in a group of about A.D. 120-130 (Wrox. 1912, p. 41) and Laxtucissa assigned to the first half of second century (Wrox. 1913, p. 30). Drag. 64, which they both used, is now considered to have lasted until Hadrian.

CA[]VCAII should be restored, not CARVCAFE, but CANRVCAII, a South Gaulish potter, found at Pompeii and nearly always recorded (as here) on Drag. 29. A bowl with his stamp in the London Mus. (A 21042) is in the style of Vespasian—early Domitian. CARVCA FE is a misreading of Hübner's (*C. I. L.* vii. 1336. 247), otherwise unknown and since corrected by Walters (*M* 1770).

OF L[.]BI is a stamp of Labio, probably pre-Flavian only (Ritterling, *Hofheim*, p. 249), to whom Mr. May's *C. I. L.* references belong. There is no potter named Labienus.

Among the mutilated stamps SV[]RTI is evidently for SERTI, a rare stamp, only noted at Amiens and Fallais and on a fragment from Corbridge.

In the section on mortaria Mr. May keeps to his Silchester forms and declines to utilize Mr. Bushe-Fox's Wroxeter types of 1912.

No. 2, BIC, is really a fragment of BRVCI (reversed), as in Wroxeter, 1912, p. 66, 2, which is dated A.D. 80-110.

No. 5, GRA[TVS], occurs at Newstead in the Antonine period.

No. 7, **MARINVS**, is of the late first century (Newstead and Wroxeter, 1912).

Nos. 11 *a* and 11 *b* are fragments of stamps of Sennius.¹

The most serious defect in this publication is the absence of an index. The plan, too, is inconveniently large, and might have been reduced by 7 in. at the top and 2 in. on the left side. Its connexion with the binding is liable to tear with frequent use. A thin calico map would have been preferable, placed, if possible, in an end pocket. The type, though delightful to the eye, seems to be larger than necessary, when compared with the Corbridge or even the Wroxeter Reports. The Coin Report, in particular, may be contrasted with those in *Arch. Ael.* As in *The Pottery of Silchester*, so here, Mr. May's felicitous terminology and apt description of difficult shapes are again conspicuous. Occasionally we notice his use of novel terms in the desire to be technically correct, as, e.g., when he describes decorated Samian as 'Red slip-glazed moulded ware'.

Amongst his quaint expressions are 'northmost building' (p. 45), and 'westmost' ditto (p. 57), 'poor masonry *unconformably* above the earlier balneum' (p. 53), and 'parallelipedons' (p. 123), which should be parallelepipeds, though the latter, meaning solids contained by parallelograms, are applied to flue tiles which are open at both ends.

The interesting collection of inscribed grave-monuments, with Mr. May's very full description and commentary, forms a fitting close to this attractive volume.

A list of misprints is appended:

p. 6. Numerosissimae for numerosissima.

p. 12. Morbuim for Morbium.

p. 15. Praertoium for praetorium.

p. 31. **TOV HTEMONIKOV** for **TOY HTEMONIKOY**.

p. 56, middle §. E. gateway should be S. gateway (actually S.E.).

p. 67, last line. The grand total of coins should be, not 101, but 115.

p. 77. Pioneers = pioneers', and p. 84, Draughts'men = draughtsmen.

p. 98. Semées = semées.

p. 102, no. 123. 950 should be 950a. In the same line the date of Cinnamus clashes with those given on p. 118.

p. 105. No. 145 is wrongly numbered no. 149.

p. 111, second line. **MAVRICIVS** should be **MAVRVCIVS**, as drawn on pl. XXX B, no. 188.

A. G. K. HAYTER.

Close Rolls of the Reign of Henry III, preserved in the Public Record Office, A.D. 1247-51. 10½ x 7; pp. vi + 732. London: Stationery Office, Imperial House, Kingsway, W.C. 2, 1922. £1 10s. net.

The period covered by this volume was one of unusual tranquillity; the truce still held with France, there was peace with Scotland, and

¹ Cf. Wroxeter, 1912, 23 on type 102, apparently of the late second and third century.

no particular disturbance in Ireland. A new crusade was being organized. Henry, writing to the archbishop of Dublin in 1250, states that he himself bore the sign of the cross on his shoulder; a fund was being raised for the redemption of crusaders who had been taken prisoners on a former occasion.

In June 1251 Prince Edward had been ill, and was to have kids and game from Windsor Park until he was better. In October following, the bailiff of Melksham was ordered to send eighty fat pigs to Windsor for the use of the king's children. This was countermanded, possibly to avoid further indisposition in the royal nursery.

Work was still being done at Westminster Abbey. The new chapter-house was apparently completed, and a new sacristy was being built. Hangings were ordered for the church, one of which was to be embroidered with leopards.

A few legal items are worthy of note. A fine is entered which was levied in Easter Term, 1251, not only *in curia domini Regis* but *coram ipso domino Rege*, and four named justiciars. This seems to imply that the king was actually present in person.

A monk of St. Mary's Abbey, York, was imprisoned (*detentum*) at Salisbury, because he refused to answer questions in court, and instead sang *Veni, Creator Spiritus*. The king ordered him to be set at liberty. Saer de Bredeford had committed a serious offence: the justices in eyre at Colchester had sentenced three robbers to be hanged; Saer cut them down; one of them was still living and made his escape. The outraged justices caused Saer's lands and chattels to be seized, but the king pardoned him and ordered restitution.

A nice legal question arose in 1249. Copin of Bruges, charged with the death of Alan of Gringele, fled for sanctuary to a church; he was captured when, according to one inquisition, he was partly in the church, but, according to another inquisition, wholly outside it, and was taken to York prison. The king ordered him to be restored to the church, but the decision was not to form a precedent.

The provisions for various feasts are of unusual interest. Cranes, swans, peacocks, and bitterns occur frequently, and in 1249 four bears were ordered, one of which was described as fat.

From the numerous gifts of 'liveries' we learn that an 'entire robe' (*roba integra*) was not a single garment, but consisted of a tunic, a super-tunic, and a mantle, generally trimmed with fur of some kind.

Some interesting details are given as to the investiture of a knight, for which the king provided certain articles. The Keeper of the Wardrobe was ordered to furnish a silk 'robe', two cloth 'robes', a mantle, a bed, and other necessities for making a knight; on another occasion a fair bed and three 'pairs of robes' are mentioned. The nephew of the Papal Vice-Chamberlain had a robe of cloth of gold; for less distinguished persons, good cloth and good fur sufficed. An 'entire bed' seems to have consisted of a mattress, a quilt, and a coverlet, the latter sometimes of fur.

Mr. E. G. Atkinson, until lately an assistant keeper, has supervised the text, which is in extended Latin throughout. This undoubtedly

saves frequent reference to the original rolls, which is not always the case with the necessarily short *précis* in English used for calendars of later Patent and Close Rolls.

Mr. Stamp's index is excellent, especially as to subjects, but we venture to question some of his translations. The large and beautiful basin to hang in the King's Chapel at Windsor was of pewter, not tin: *stannum* in medieval Latin probably always means pewter when applied to vessels, &c., cf. French *étain*.

Gris was surely a fur, not a cloth, probably badger. Donjon as a translation of *carcer* rather suggests Horace Walpole or Sir Walter Scott. And why, oh why, should *leporarii* be included among the hawks? The list of remarkable names might have included others, e.g. Ekemundrinus, Emmecina, and Perewer' (a woman).

W. PALEY BAILDON.

Wenceslaus Hollar and his Views of London and Windsor in the Seventeenth Century. By ARTHUR M. HIND. 11 x 9; pp. xiv + 92. 64 plates. London: John Lane, 1922. 31s. 6d.

Thomas, Earl of Arundel, rendered no greater service to art in England, than when he brought back with him from Germany in 1636 'one Hollarse, who drawes and eches printes in strong water quickly and with a pretty spiritte'. It is not, however, merely for his perfection in his art that Hollar commands our respect and gratitude. Professor Hind rightly describes topography as by far the most important section of Hollar's work. Though he disclaims any intention on his own part to write a book on topography and aims at presenting Hollar as an etcher, he has with good judgement selected for illustration that section of the artist's work which has most attraction for Englishmen. No one can have used Hollar's drawings for the purpose of topographical illustration without being impressed as well with their extraordinary accuracy as with their artistic excellence. Professor Hind does not attempt any general account of Old London, but he has produced a volume which will be invaluable to all interested in London topography. The value does not consist merely in the bringing together of reproductions of all the most important of Hollar's views. We are also given a complete and reasoned catalogue of the etchings of London and Windsor, which will be of the greatest service. This catalogue fills by far the larger part of the volume. It is preceded by an account of Hollar's life, and a survey of his work dealing as well with the historical and other prints, as with those topographical illustrations which are the main purpose of the book. The topographical prints cannot be studied or used to advantage without comparison one with another, and it is here that Professor Hind's description will be of special service. Of the *West Central District of London*, which he justly describes as a masterpiece, he writes: 'It is doubtful whether any but the most important houses were really drawn with accuracy.' Of the fidelity with which Hollar has depicted, for instance, Essex and Arundel Houses, no one who has studied the map in connexion with other authorities can have any doubt; and it is marvellous how the same accuracy appears in the minute representation of Essex House in the *Prospect of London and*

Westminster from Lambeth. But it is equally clear that Hollar was not concerned to the same degree with minor subjects, and in order to have space for the more important has deliberately cramped the less important things like the buildings which separated Essex and Arundel Houses. This is a point which requires to be kept in mind by those who use the views for topographical purposes. Admirable though the West Central London is, one must regret that Hollar has not left us more of his detached views like the four of Arundel House. The view from Milford Stairs is one of these. Professor Hind figures both the etching and the original drawing in the Pepysian collection. The latter is of special interest, for the buildings in the foreground are clearly the privy and slaughterhouse described in a survey taken in 1590; their medieval character shows that they are a survival of the original Bath Inn. The view from the roof seems to be taken from the leads over the gallery. Professor Hind was of course unable to record the recent publication of the Milford Stairs drawing and six other drawings by the London Topographical Society. They are useful for comparison with the etchings. The drawing of Somerset House can be dated after 1656, since it shows the Water house by Strand Stairs.

To discuss at length the various problems which would be raised by other London views, by the illustrations of Old St. Paul's, and by the Windsor views would be impossible. But it is worth directing attention to the striking manner in which the ancient cathedral (even after the loss of its spire) stood up above the city when seen from the north (pl. XLV). The volume, both for its letterpress and plates, is one for which all lovers of art and students of topography owe the author a deep debt of gratitude.

C. L. KINGSFORD.

British Flags, their early history, and their development at sea; with an account of the origin of the flag as a national device. By W. G. PERRIN, Admiralty Librarian; illustrated in colour (14 plates) by Herbert S. Vaughan. 9½ x 6; pp. xii + 207. Cambridge: at the University Press, 1922. 30s.

This tall and handsome book is an important addition to the Cambridge Naval and Military series. The author, who, in his official capacity, has access to sources of information not available to the ordinary student, treats in his useful introductory chapter of the origin of flags. Being careful to fortify his statements and conclusions by copious notes and references to authorities, he marshals a multitude of facts of remarkable interest and value. He traces the development of the flag from the standard of the Egyptians, of the Semites, and of the ancient Greeks, through the Athenian *phoinikis* and the Roman *aquila* to the flags shown on Carolingian ivories of the ninth and tenth centuries. Those shown in the Bayeux stitchwork take their proper place in the story; the banners of kings, nobles, and military orders which flew in the Crusades mark another stage in the development; but it is not until the Italian maritime cities, such as Genoa and Pisa, had become firmly established as national entities that our author is able to see a national flag. Side by side with these naval powers he observes Venice displaying her banner of St. Mark; Milan and

Cremona, Florence and Parma, Padua and Verona going to war with their sacred *carrocci*; Riga and Lübeck and Hamburg with their flags of carefully specified devices; till in 1297 appears the first recorded English provision for the flying of a national flag at sea.

Having thus cleared the ground the author takes us to the main subject of his book; and in his chapter on early English, Scottish, and Irish flags records many facts of archaeological value. The use of the flag of St. George is traced to the fifth year of Edward I, when Admetus, the king's tailor, was ordered to provide 340 pennoncelles and brassards 'of St. George's arms', *pro peditibus regis* for use in the war against the Welsh. Mr. Perrin makes out a good case for assigning to Edward III the 'dethronement of Edward the Confessor from the position of "patron saint" of England and the definite substitution of St. George in his place'. He produces documentary evidence for the employment in 1385 of St. Andrew's silver saltire as the Scottish emblem, and assumes (without, however, adducing evidence) that it had been so adopted 'at a very early period'. He very properly points out that the so-called St. Patrick's saltire, red on white, is in fact no emblem of the Irish people but the heraldic device of the great Norman-Irish house of FitzGerald.

The author treats of the subject of the Union flag with great thoroughness; and though the rules for its construction and the dates of its composition are quite well known, he has amassed so many facts and quotes so many documents bearing on this important matter that the reader may have complete confidence in the account here given of its genesis, its use, and its correct form.

When, however, Mr. Perrin goes on to deal with the banner of the king's arms, which he describes in its successive forms under the popular name of 'the Royal Standard', he is on less sure ground. This section of his book not only lacks that precision which any writer on heraldry must employ; it contains more than one misstatement and assumption which should not have been allowed to appear in a work of this importance. For instance, it would be impossible to colour the shield of Edward the Confessor (p. 74) from his blazon of those well-known arms; and the colour of the lilies of France (p. 74) is omitted. The author adduces no proof of his assumption (p. 76) that the leopards of England 'appear to have been regarded not only as the personal arms of the Sovereign but also as the English national emblems'. But surely the golden leopards marched in the king's quarrel on the banners displayed by host and ships. In a sense indeed they typified England, but it was because the king himself was the personification of England. The remainder of the chapter, 'Flags of Command', dealing with the Admiralty flag of the foul anchor, the flags of Admirals of the white, the blue, and the red, and the excellent section on 'Pendants of command', is, however, on the very high level that the rest of Mr. Perrin's book has led us to expect.

The chapters on 'Colours of Distinction', Signals, and the ceremonial use of flags are full of interest, and are written in the lively style and with the careful attention to detail, supported too by a wealth of reference to authorities, that we have already remarked. This part of the book deals with matters not commonly familiar to

landsmen; but they are packed with so many important historical facts, they are so romantic, they smack so keenly of the sea, that they add immensely to the value and the charm of this treatise on British Flags.

Of the get-up of the book we may remark that it is in every way worthy of the Pitt Press; paper and print are everything that can be desired. Of the coloured illustrations it must be said that, while the drawings from which they are reproduced are not markedly worse than those which disfigure similar books, the University Press, by the extraordinary care and fidelity of its colour-printing, has done its very best to atone for their deficiencies.

E. E. DORLING.

The University of Cambridge in the Eighteenth Century. By D. A. WINSTANLEY, M.A. $8\frac{3}{4} \times 5\frac{1}{2}$; pp. viii + 349. Cambridge: at the University Press, 1922. 17s. 6d.

Cambridge at the beginning of the eighteenth century has been drawn by Monk in his life of Bentley, and at the close by Gunning. Its academic studies have been splendidly set out by Canon Christopher Wordsworth. We have had to wait till now for a book which could vie with the first of these. Bentley died in 1742, and the present volume carries us on from 1748 to 1768, the years of the Chancellorship of the Duke of Newcastle. The book is in fact a full length portrait of the Duke as Chancellor. In the background are the University dons, their social life and aspirations. It is a study of University politics, political jobbery, and institutional progress. In brief it tells the story of the election of the Chancellor in 1749 (p. 49), of the state of Trinity College in 1755 (p. 326), of the election of the Regius Professor of Divinity in 1756 (p. 193), of the Provost of King's in the same year (p. 317), of the building of the new wing of the library in 1758 (p. 225), of the election to the Lucasian Professorship and the Master-ship of Magdalene College in 1760 (pp. 198 and 319), of the internal hostilities in the Chancellor's own College of Clare in 1763 (p. 304), of the election of the Master of Trinity Hall in 1764 (p. 295), and of the Master of St. John's, the Lady Margaret Professor of Divinity (p. 264), and the High Steward, all in 1765 (p. 137).

This is a continuous story of intrigue, laid bare from the Chancellor's papers. The book is a triumph of knowledge and cleverness, by one who is a lover of intrigue and a master of detail. The prominent note of the book is malice. The antiquary, however, will find dons searching records for precedents (p. 49), and Cole once shocked (p. 48), and once dining with Horace Walpole (p. 58). To three of the portraits in the book no artist's name is assigned, though the portrait of Philip Yonge has been attributed to Reynolds, and that of Caryl is a copy from the original by Wright of Derby. In fact art, music, and letters are banished from the volume. For all that the book is invaluable, both to the antiquary and the historian.

CHARLES SAYLE.

Royal Commission on Historical Monuments (England). An Inventory of the Historical Monuments in Essex, vol. iii. $10\frac{3}{8} \times 8\frac{1}{4}$; pp. xxxix + 274. London: Stationery Office, Imperial House, Kingsway, 1922. 40s.

The first volume of this Inventory was reviewed in the first volume

of the *Antiquaries Journal* at page 152, and the terms of that review were such that many persons were induced to study that volume and look forward with delighted anticipation to those that were to come. In this volume they will not be disappointed, for it is quite up to the level of its predecessors, and its excellence justifies the very large circulation which it is to be hoped it may obtain. The arrangement of the work continues as before, and the index is all that can be desired in its kind. Further, the volume is complete in itself, the excellent glossary being reprinted exactly as it was in the second volume. Any person desiring to make a systematic study of the remains of antiquity in north-east Essex is furnished with a complete guide without necessity to refer to any other volume. The outstanding point of interest in this volume is obviously that it includes Colchester, one of the most interesting places in the kingdom. It was necessary to give a very full account indeed of its many attractions, and it was wise to devote more than fifty pages to doing it, and a careful examination of the matter set out in those pages will show satisfactorily that there is not a page too much. It had of course to be a succinct account, and between the two extremes a balance has been struck which is well justified from every point of view.

In looking through the accounts given of the various parish churches there is in the main the same story of destructive restoration which has done so much to lessen the interest of Inworth. In the whole district there is only Bradwell which is left practically untouched with its interesting fittings.

Of secular buildings it is sufficient to name Layer Marney, Paycocks, and St. Osyth to show that the district is worthy of attention for a student of domestic buildings, while under each parish a feature is made of cottages, inns, and farmhouses fit for separate notice.

The illustrations, many of which are quite admirable, have naturally had to be presented on plate paper, which no doubt adds seriously to the weight of the book; but, in present circumstances, it is hopeless to attempt adequate and sufficient illustration in any other way without unduly increasing the price of the volume, an alternative which would prevent its purchase by many of those for whom it is principally intended. Attention may be directed in this connexion to some reproductions of stained glass (a difficult subject) at Layer Marney and Rivenhall. But on another side comment cannot be quite so favourable. It is melancholy enough to read over and over again that monumental brasses have been removed from floors and put on the walls of the churches where they are so out of place and meaningless. Sometimes they are moved into a vertical position, slab and all, but more often the slab is left behind or thrown out and even destroyed altogether and with it all its story. But when a fine brass as at Pebmarsh does remain in its slab it should be adequately represented, which cannot be said of its presentation, opposite page 171, possibly from a mounted rubbing. At any rate there is no indication of the canopy and the marginal inscription, and the fragment of inscription shown can scarcely be in correct position. The illustration from Little Horkesley is still worse. There may be a good deal to be said for a direct photograph of a brass; but at any rate it should be directly

above the centre and not largely out of focus. The effect of the one reproduced is surely quite absurd. On the other hand, every one will be grateful for the admirable reproduction of the fine slab at Middleton opposite page 182. These early slabs are not common in the district and so careful a representation is of immense interest, and it corrects a slip in the letterpress which conveys that the rector is *holding* his chalice.

The parishes are conveniently arranged alphabetically, but it is surely not very usual to find Great Horkesley under G and Little Horkesley under L. It may be strictly 'according to Cocker', but it is a bit disconcerting at first.

RALPH GRIFFIN.

Magical Jewels of the Middle Ages and Renaissance particularly in England. By JOAN EVANS, B.Litt. 9 x 5½; pp. 264. Oxford: at the Clarendon Press, 1922. 16s.

This attractive subject has been most adequately treated by Miss Evans, who has produced a learned work which will also prove of general interest. For so human is the love of precious stones that they make a wide appeal even when, as in the present case, they are approached from the scientific standpoint.

If the palaeolithic paintings in the Spanish and French caves are accepted as due to magical beliefs, it is clear that superstition can be pushed a long way back in the history of the human race. And as by some authorities it has been considered that the origin of jewellery is as much amuletic as ornamental, it is easy to see how belief in the fortunate or unfortunate properties of precious stones would have arisen. The author points out that it was in the conscious or unconscious practice of sympathetic magic that the origins of so widespread a belief are to be found.

Religion, magic, and science are clearly differentiated by Miss Evans, and the influence of Babylonian astrological beliefs is indicated, as well as the later stages by which so much that was magical passed over to the Christian Church, which, though opposed to all forms of magic and condemning the engraved talisman, carried on the tradition of the medieval amulet to which classical science had attributed medicinal virtues, the main content of the classical attributions being preserved by the conservatism of the middle ages. On the other hand, the astrological lapidaries (treatises on the properties of precious stones), condemned by the Church, continued only in the East.

Among Christian lapidaries one of the earliest belongs to the fourth century, its author being Epiphanius, bishop of Salamis.

From the seventh century to the eleventh no Western lapidaries are known, but the latter century was marked by the appearance of several. Among early medieval lapidaries the most important is that written by Marbode, bishop of Rennes (1067-81). Of this work, written in Latin hexameters, more than a hundred manuscripts are known; it was translated into seven languages, including Irish.

In Spain, Arabian influence kept alive the astrological side of the subject. The best known Spanish lapidary is that named after Alfonso X, whose court was typical of the Arab renaissance. The talisman or engraved gem was inherited by Europe from the East. The

device, usually sacred or symbolic in character, is often directly or indirectly of astrological significance.

The virtue of names was much credited in the middle ages; those of the three kings were particularly popular, being found on such well-known objects as the *Domhnach Airgid* and the Glenlyon brooch.

The Renaissance expanded, but did not change the interest in precious stones, for the medieval lapidaries being derived from classical sources were little affected by the increased knowledge attained by the scholars of the Renaissance. But jewels in the later period seem to have been valued on account of their medicinal rather than magical properties. In the seventeenth and eighteenth centuries came the age of criticism, the increase of medical knowledge discrediting the belief in the prophylactic power of gems. By the end of the eighteenth century magical jewels had fallen into disuse in Britain, except in the remoter and less civilized districts.

The author points out that the modern survivals of wilful superstition in this country are not beliefs inherited from medieval tradition and are often contrary to it. It will probably be a surprise to many that the belief in the unlucky character of opals is not earlier than Scott's *Anne of Geierstein*. Appended to the text of the book are seven lapidaries dating from the late twelfth to the fifteenth century.

The illustrations are excellently chosen and reproduced. The index in three parts makes it easy to find any desired reference.

E. C. R. ARMSTRONG.

Old Cowbridge: Borough, Church, and School. By LEMUEL JOHN HOPKIN-JAMES. $8\frac{1}{2} \times 5\frac{1}{2}$; pp. xv + 324. Cardiff: Educational Publishing Company, 1922. 12s. 6d.

Dr. Hopkin-James has brought together a valuable collection of historical references to the ancient town of Cowbridge, and its church and school, and by printing full extracts from many of them has earned the gratitude of students of country-town life.

Archaeologists will regret the absence of more details of the evidence advanced to support the theory that Cowbridge stands on the site of *Bomium* of the Antonine *Itinerary*; and although Dr. Hopkin-James may be right in rejecting Professor Haverfield's findings on this question he is not on very safe ground in quoting Codrington against him, and it is a little unkind to make the Professor write of *Isca Silurium* and *Nidium*. For the present the verdict must be *not proven*, as it must also be on the interesting theory that at Cowbridge, not Caldy, was established the Early Christian monastic settlement of Piro situated *non longe ab hoc monasterio*, i.e. that of Illtud, which is generally accepted as having been at Llantwit Major, four miles away—it must, however, be remembered that, as Dr. Lloyd has pointed out, the phrase 'not far from' may perhaps be 'taken loosely as a traveller's casual estimate'.

Dr. Hopkin-James describes and illustrates the medieval walls and gates of the town, and traces their gradual destruction, one only of the gates being still in existence. These fortifications cannot, however, in their present form, be of the early date he assigns to them, the eleventh-century Norman conquest of Glamorgan; the defences of

this period would almost certainly have consisted of ditches, and banks surmounted by palisades.

It is extremely probable that the interesting name Counsel Tut (Twt) which is applied to a piece of ground of which 'the centre ... is raised and the elevation looks artificial' points to the existence of a motte or castle mound of the Norman type so frequent in Wales, to which the name of Twt hill is sometimes applied (at Rhuddlan, for instance, where the establishment of a new borough followed the construction of the motte, also in the eleventh century). This 'elevation' is no doubt what now remains of the 'large tumulus' to which reference is made by earlier writers quoted by Dr. Hopkin-James.

The points of criticism raised here are mainly technical, and all lovers of the past will feel grateful to the author for the time and research he has devoted to a work well suited to its main purpose, which is to bring home to his parishioners and neighbours the 'story of the long process by which the place in which [they] live came to be what it is now'.

W. J. HEMP.

The Bronze Age and the Celtic World. By HAROLD PEAKE, F.S.A. 11 x 8½; pp. 201, with 14 plates and 26 text-figures and maps. London: Benn Bros., 1922. 42s.

Mr. Peake's book, which had been awaited with eagerness, is packed with information and discusses many theories. To do it justice would require much space. He sets out to discover in what region the Celtic tongues originated, and how and when they spread to the areas in which they were spoken some two thousand years ago: to trace in outline the history of Celtic peoples and Celtic lands from the Würmian glaciation to the Roman conquest of Britain, with a view not so much to record evidence as to interpret it, to restore the main features of early history rather than to describe archaeological remains. An adequate discussion of this question, the difficulties and implications of which are immense, can only be reached by pressing into service prehistory and physical anthropology together with the evidence derived from comparative philology and the distribution of place-names. Mr. Peake's erudition and dialectic skill have enabled him to accomplish his task with success, and the benefit is considerable to those who require a clear, if theoretical, exposition of the matter. An account is given of the successive industries, and of the populations which inhabited Celtic lands from the Upper Palaeolithic down to the Neolithic period; it being concluded that the mass of the population in this area about 3000 B.C. were the descendants of the long-headed European and North African populations of the Upper Palaeolithic period. The prevailing type was the latest to arrive from Africa, the truest representative of the Mediterranean race.

An organized commerce had begun in the Mediterranean region at the close of the Stone Age, increasing rapidly with the introduction of metal, trade being carried on by both land and sea. Gold was probably the first metal discovered, and the author's suggestion as to the first use to which it was put is romantic and possible. The invention of bronze by hardening copper with the addition of tin seems to have occurred in western Asia some 3,000 years B.C. A comparison of the

copper and bronze axes found throughout the Mediterranean from Cyprus to Spain with those found along the west of Europe from Spain to Brittany shows a gradual change in form from the triangular axes of Cyprus to the western type with semicircular butt and widely splayed edge, a similar development being traceable in copper daggers. The gradual evolution of the axe and dagger as they pass westwards and northwards is thought to indicate a line of trade spreading farther to the north-west as the centuries pass; the gold of Ireland and the amber of the Baltic being the lodestone drawing the early traders from the Mediterranean to the north and west. Various routes are indicated, and it is suggested that the great number of copper axes found in Ireland is the result of the native attempts to supply themselves with weapons, for copper is plentiful in the island, while tin is not found in workable quantities. Against this it is to be remembered that the Irish copper axes can be arranged in a definite series showing an evolution from the simplest, copied from an axe-head of stone, to the later type with widely splayed edge. Coffey has argued with considerable force that this progressive series denotes that Ireland passed through a copper period before the use of bronze was known in the island. Foreigners seem to have reached Celtic lands some 4,000 years ago, and Mr. Peake considers these 'prospectors' to have introduced the Megalithic culture; their original home is to be placed in the Persian Gulf, and the Etruscans were a branch of the same race. The Celtic cradle from whence the Celtic tongues spread to the west is placed by Mr. Peake in the Alpine zone, from the Jura to the Iron Gates, from the northern slopes of the Carpathians to the northern foothills of the Alps.

The discussion of the Beaker, its origin and dispersion throughout Europe, leads to interesting conclusions which are, however, surpassed in importance by the evolution and distribution of the bronze leaf-shaped sword. This was developed in the Hungarian plain from the bronze ogival dagger, and Mr. Peake has clearly shown its gradual evolution through seven stages, the last being the Hallstatt form. The classification is new, being based upon the shape of the blade's butt where it joins the tang, avoiding the older division by the shape of the tang end into fish-tailed and trapezoidal. With the general conclusions reached archaeologists will be in agreement, but the date for the Hallstatt sword (type G), 1000-875 B.C., must be lowered considerably for England and Ireland. Far-reaching results are arrived at by studying the distribution of the various types of swords; for example, type F (the fish-tail ended sword) is frequent in the British Isles, over 100 specimens having been found in Ireland, while the Hallstatt type is not uncommon. Mr. Peake considers these swords denote an invasion from the Continent, other remains, such as finger-tip pottery, being typical of the same intruders, for whom a date of about 1000 B.C. seems indicated. The arrival of these people was ultimately due to dispersal from their old homes by invaders armed with iron swords invented in the Koban district, rich in iron.

The invaders of the British islands are equated by Mr. Peake with the Goidels or Gaels, i.e. people speaking the Q-branch of the Celtic language. In this the author follows the late Sir John Rhys's division

of the Celts into *P* and *Q* with two corresponding invasions. It is admitted that this view will not be readily accepted by Celtic scholars, since philological evidence for *Q*-Celts in England is lacking. There is a complete absence there of early Goidelic place-names, any traces of Goidelic speech in Britain being traceable to settlements of Irish Goidels in historic times. That there was an invasion of England in the Hallstatt period seems on the archaeological evidence necessary, for the Hallstatt remains are too numerous to be accounted for by trade relations, but the philological evidence against the invaders being *Q*-Celts is too strong to be rebutted by a re-statement of Rhys's theories, and this portion of the work will probably meet with opposition.

A study of Mr. Peake's book conveys a large view of the present-day methods and aims of prehistoric archaeology, and the skill and ingenuity with which he has handled intricate problems of race and origin call for admiration. It must, however, be remembered that much of such work is essentially subjective, and the questions dealt with are so remote in space as well as in time that it is hardly possible to expect entire acceptance for all the theories advanced. But those who study the work with care will find their views on the problems surveyed considerably enlarged. The text-illustrations and maps are clear; the plates leave nothing to desire except that it had been possible to print the descriptions below the figures rather than on the opposite leaf. A copious bibliography and a satisfying index conclude the book.

E. C. R. ARMSTRONG.

Togail na Tebe. The Thebaid of Statius. The Irish Text edited . . . by GEORGE CALDER. 8 $\frac{3}{4}$ x 5 $\frac{1}{2}$. Pp. xxiv + 431. Cambridge: at the University Press. 1922. 42s.

Of most of the Irish texts representing the 'matter of Rome,'—the Alexander saga, the tale of Troy, Virgil's *Aeneid*, and Lucan's *Pharsalia*—there exist already excellent editions. The rendering of Statius has hitherto been accessible only in an incomplete and unsatisfactory publication. Dr. Calder's edition is intended to fill this gap, and, on the whole, carries out the intention. But there are one or two points in which the statements of the editor appear to me to be misleading to the student of Irish literature.

The editor's introduction opens with the statement that the note from Egerton MS. 1781, which he prints on pp. xxii, xxiii, lets in a flood of light upon the circumstances under which the MS. was written. It does, but the facts revealed in that light are incorrectly interpreted here. Dr. Calder comes to this strange conclusion:

'No doubt the monasteries were at this period the great publishing houses of MS. literature; but proof is found here that side by side with the ecclesiastical system the old educational methods represented by the *filidh* still retained a hold upon the population.'

What proof is there that in the fifteenth century the monastic houses were the chief centres of transcription of the native Irish literature? Practically all the books of that period which have come down to us were written by those very *filidh* (or the closely related professions of historians and lawyers), whose activity is here represented as something

exceptional. The scribes were practically all laymen, though in the earlier period the writing of manuscripts had been almost a monopoly of the clerics. Thus the writer of the Egerton MS., Diarmaid bacach Mac Parthaláin (whose name Dr. Calder has mangled by a misreading of the text), belonged to a lay family of scribes, and wrote this book in the barony of Tullyhaw, co. Cavan, the territory of the Magaurans or MacGoverns, of whom he was probably a dependant, between 1484 and 1487. The scribes of the other MS. used for this edition (Edinburgh, Advocates Libr., MS. viii) were probably of the same condition. There were two of them, one named Fergus O'Farrell, probably hailing from co. Longford. Dr. Calder says that there are many indications that this MS. was written in a monastery. But the reasons he gives are not very convincing, and a note on p. 48 seems to point the other way. This note should probably read: 'Comortus andso re fer na leithe secha so hios', which means: 'A challenge here to the fellow down below'. Such challenges are not uncommon in MSS. written in the poetical schools (see S. H. O'Grady, *Catalogue of Irish MSS. in the British Museum*, p. 330), and are usually written calligraphically in rivalry with the writing in the MS.

Thus, in all probability, both our manuscripts were copied by lay scribes, and in the district of North Leinster, which lies near the Connaught frontier. The editor's suggestion that they were transcribed in Munster is therefore untenable.

The text is clearly older than these copies, and the next question is, by how much? Dr. Calder assigns the translation to the early Middle Irish period. A clear definition of Irish linguistic periods has not yet been attained, and the problem is complicated by the traditional and archaistic style of the surviving texts. But there is something like an agreement among competent scholars that the Middle Irish period extends from the second half of the tenth century to about 1250 A.D. On this reckoning the early Middle Irish period would cover at the most the eleventh century. And it seems to me extremely unlikely that our text belongs to that time. The arguments for an early date here put forward are not convincing. Sporadic neuters survive into the seventeenth century, and cannot be adduced in evidence. And one argument brought forward by Dr. Calder really makes against his case. He asserts that the text swarms with deponent forms. The deponent, already dying in Old Irish, disappears rapidly in Middle Irish, and, if the text *did* swarm with deponents, we should have to put it very early indeed. But, as a matter of fact, it does not. So far as my observation goes, there is only one frequent deponent form here, though that occurs often enough. It is the form for the third person singular of the past tense, and in a large proportion of the cases in which it appears it has no historical justification, but is merely a pseudo-archaism. This spreading of a false deponent in this particular case is particularly noticeable in certain texts of the twelfth century, and on this and other grounds I should be inclined to place the Thebaid version at earliest in the second half of the twelfth century. It might even belong to the first half of the thirteenth.

These criticisms bear upon the literary-historical problems of the text, and questions of this kind have been so little investigated by

Celtic scholars that an editor may be forgiven for adopting untenable views. The text and translation are well executed, with occasional slips; and the full glossary will be a very valuable help to students of Irish literature. Dr. Calder, the most productive of Scotch Celtic scholars, is to be congratulated on a useful and conscientious piece of work.

ROBIN FLOWER.

Iranians and Greeks in South Russia. By M. ROSTOVITZEFF. 11 $\frac{3}{4}$ x 8 $\frac{3}{4}$; pp. xvi + 260. Oxford: at the Clarendon Press, 1922. £4. 4s.

This volume, well illustrated and admirably produced by the Clarendon Press, is the work of a scholar known for many important archaeological studies, and now, through the force of circumstances, exiled from his native country. None could be better qualified to treat of the chosen subject; and thanks to what he himself describes as the self-sacrificing kindness of Mr. J. D. Beazley, who revised the whole from the author's original English and French, we have before us a book on South Russian archaeology of extraordinary interest, and readable throughout. It forms a useful companion to the great work of Minns; with these two guides the English reader is provided with a key to a group of antiquities highly significant for the archaeology of northern Europe in the earliest medieval centuries.

Iranians and Greeks in South Russia, dealing with an area which received and transmitted many artistic influences, is one of those books which widen the view by establishing links between archaeological provinces apparently remote and commonly looked upon as unrelated. By connecting, through a series of transmitted motives and methods, ancient Mesopotamia with the steppe-region between the Altai and the Caspian, this region in its turn, on the one side with China, on the other with South Russia, by then connecting South Russia with Teutonic Europe as far west as our own country, it forces the specialists concerned with different points along the line to recognize that their provinces are not discontinuous, but that a common influence runs through their several territories. It does its part in raising archaeology to its true dignity; it awakens consciousness of an organic quality in our study and makes us realize that what lies before us is not an aggregate but a whole. Those who are learned in Sumerian, Babylonian, and Assyrian matters, those versed in the ancient art of China, the Greek archaeologist, the students of barbaric European civilization from the Black Sea to the Atlantic and from the Danube to Scandinavia, all these, by being brought into relation with South Russia, are brought into relation with each other. The book thus stimulates in the same way as Strzygowski's recent *Altai-Iran und Völkerwanderung*; it makes the old world shrink before us as we contemplate the extraordinary range of artistic influence, when once it gains momentum and sets out into the unknown. In both books specialists will find material for legitimate criticism; they may detect errors of fact here, untenable theories there; yet none the less they will feel their particular provinces brought within a wider unity and their whole horizon enlarged.

A map of the Eurasian continent showing the lines of influence along which artistic models or suggestions passed through the ancient

world would resemble a road map, and like such a map would show at certain points important junctions. This book introduces us more especially to two junctions, one primary, the other secondary, and dependent upon the first. The primary junction is in that Trans-Oxian region between the Caspian and the Altai which Strzygowski, for brevity, calls Altai-Iran. It is a region in which the nomadic and the settled life meet, and through which trans-continental commerce has always flowed. The central fact for our present purpose is that here motives and methods coming up from ancient Mesopotamia were received by nomadic peoples mainly of Iranian stock and belonging to the great Sacian (Saka) family of the steppes. These peoples, to whom high artistic gifts must be conceded, imprinted upon the borrowed material a characteristic style of their own. Their earliest representatives known to history, the Scythians, carried this style westwards into Russia in the eighth century B.C. Four centuries later a second branch of the same family, the Sarmatians, came after them, picking up and incorporating Scythian motives, and developing certain oriental crafts with a new intensity. South Russia itself was the secondary junction, where important Greek lines ran in, and connexion was made with northern Europe through the Goths. The Greek influences, treated both by Minns and by Rostovtzeff, were of much interest in themselves, but did not change the character of Scythian and Sarmatian art, or divorce it from ancestral principles totally opposed to the Hellenic. The Greeks in South Russia are, therefore, of less significance to us as Anglo-Saxons than the Goths, who appeared in that region in the second century of our era, supervening upon the Sarmatians and freely absorbing their arts. For the Goths, when they moved westward at the time of the Great Migrations, transmitted to other Teutonic tribes what they themselves had derived from Sarmatian sources.

The art of our Teutonic ancestors was thus influenced by that of Central Asia, and reinforced against the Graeco-Roman. The Asiatics had neither liking nor understanding for the imitation of nature in which the late Greeks and the Romans took delight; their art was one of formal design. It had no content demanding intellectual concentration on the part of the spectator; it had no place for modelling, preferring contrast of line and colour upon a single plane, over the whole of which the ornament extended. But northern Europe was more or less of the same mind; the Goths pushed an open door. The Bronze Age and the Early Iron Age in Europe had also possessed an art of formal design excluding careful imitation of nature; the motives and methods brought by the Goths were therefore at once understood and readily assimilated. This community of taste explains the ease with which Iranized forms from ancient Mesopotamia were incorporated in the art of the tribes which inherited the Roman Empire in the West. It explains the appearance, alike in Lombardy and Germany, Gaul, Britain, and Spain, of features showing Scythian or Sarmatian affinity. In animal ornament such features are: the presence of monstrous forms; the 'tacking on' of parts of a creature, such as a bird's head, to the extremities—for example, to the tails of quadrupeds; the dismemberment of the whole creature; and the

formation of a purely ornamental figure composed of animal parts, such as four heads and necks conjoined at the base, forming a symmetrical design. In jewellery the Iranian influence appears in the very popular *orfèvrerie cloisonnée* or 'inlaid jewellery', in which flat stones or pastes, most commonly red, are set in cell-work, generally of gold. This was a process which was practised in the Scythian area early in the sixth century B.C., as shown by the well-known objects found at Kelermes on the Kuban, but earlier still in Mesopotamia and Egypt, from which it must originally have entered Scythia. Barbaric Europe owed the animal ornament chiefly to the Scythians, the inlaid jewellery to the Sarmatians. The latter people, though preserving Scythic animal motives, was especially fond of work in coloured stones, in which predilection the Asiatic craftsmen may have been confirmed by their Greek neighbours of Panticapaeum and other Black Sea towns.

Northern Eurasia, then, had its own art, a decorative art resting upon non-representational principles. But for the Christian Church, which required representation of nature to give its history and doctrine pictorial expression, this formal art of decoration might have predominated north of the Alps until the Renaissance; without the Church, the Carolingian artistic revival might not have taken place. This northern art, differently manifested, was national in Germany, Gaul, Spain, and Britain; and as the development lent to it by the Goths and their Sarmatian teachers came west to us directly from the south of Russia, the importance of that part of the world to English archaeology is sufficiently obvious, whether or not we accept such a bold suggestion as that which finds a Sarmatian origin for the line of applied metal triangles round the horn in the British Museum from the Anglo-Saxon barrow at Taplow.

Restriction of space prevents mention of numerous subjects and points of interest treated by Rostovtzeff in this volume; we have preferred to dwell rather upon broad lines and general principles. But the range of the subjects introduced by the early history of South Russia includes the following: The Copper Age in the Kuban, north of the Caucasus; the importance for ancient metallurgy of the south-east corner of the Black Sea; the expansion of the Scythians in Asia and Europe, their relation as nomad overlords to the agricultural and trading Thracians, their encouragement of commerce along the great river valleys between the Black Sea and the Baltic, their organized State, established as early as the sixth century B.C.; the arrival and policy of the Sarmatians; the relation of both Scythians and Sarmatians to the Greek colonies of the Euxine; the 'Iranization' of some among these colonies, the Hellenism of Cherson, the Christianity of Panticapaeum; relations with Rome and Byzantium; the kingdom of the Bosphorus; the movement of Germanic tribes to the Dnieper valley; the contact of the Goths with the Sarmatians; the rise of the Slav State of 'Kievan Russia' when South Russia had been swept clean of its earlier population after the Hun invasion; new relations with Constantinople and the Baltic. In the historical framework is set a rich archaeological material. The tombs, weapons, ornaments, and jewellery of the Scythians and Sarmatians are described, and illustrated by singularly good photographs, many hitherto unpublished, and

by a number of line-blocks from drawings; many of the fine Greek works of art from the South Russian tumuli are also described and reproduced. It will be found that the reader of this book will have small reason to complain either of monotony in subject-matter or of inadequacy in illustration.

The present short notice may end by a return to the point with which it began. This book has many merits, but for us its deeper significance lies in the manner in which it enlarges our horizon and enables us to trace to their remote sources far-travelling streams of influence affecting the history of our early national art. It is the fault of much admirable specialism, in archaeology as in other branches of human study, that, fixing its gaze with extreme steadiness upon the part, it has often failed to look up from the part to survey the whole. We require good specialism in archaeology; there cannot be too much of it. But from time to time all specialists need to be reminded that they are concerned with a body of knowledge, forming an organic whole or entirety. We require now and then archaeological books which give us the long lines of development, with an outlook over systems and groups organically linked together; thus only can we exorcize the provincial spirit. Professor Rostovtzeff's book is of this character; and since with the help of our scholars and publishers it comes to us with attractive form, making its appeal in sound English, it may be sincerely commended to our antiquaries.

O. M. DALTON.

The Life and Times of Akhnaton, Pharaoh of Egypt. By ARTHUR WEIGALL. New and revised edition. $8\frac{1}{2} \times 5\frac{1}{2}$; pp. xxxi + 255. London: Thomson Butterworth, 1922. 12s. 6d.

The new edition of Mr. Weigall's popular work on the heretic-king Akhenaten, Akhnaton, or Ikhnaton, has appeared very appropriately just at the time of the discovery of the tomb of Tutankhamen, son-in-law of the heretic, by Lord Carnarvon and Mr. Carter. In the reissue of the book Mr. Weigall has left the text on the whole in its original form, but has made some additions rendered necessary by the progress of knowledge since 1910, when the book was originally published, and has written a new preface in which various disputed questions are discussed. The argument of the book, which gives a very favourable estimate of Akhenaten (though one not so entirely favourable as Professor Breasted's), remains the same: there are very considerable additions to the excellent illustrations. The author defends his original ascription of the mummy found in the tomb of Tiy as that of Akhenaten, on the authority of Professor Elliot Smith's determination of its sex, and there is little doubt that he is right. The original view of the late Mr. Theodore Davis, at whose expense the tomb was excavated in 1907, that the mummy was that of its real owner, Queen Tiy, the mother of Akhenaten, cannot stand if Professor Elliot Smith was right; and even the famous canopic jars with the royal head upon them, which Mr. Davis was resolutely convinced were Tiy's even if the mummy were not hers, must also probably be assigned to Akhenaten, as Mr. Weigall maintains, and not to the queen. Mr. Davis was possessed of an *idée fixe* that everything in the tomb must be Tiy's.

He was a most generous paymaster of excavations, but not an archaeologist; yet he had no hesitation in expressing his opinions in print; and it was most difficult for the actual discoverer and excavator of the tomb, the late Mr. E. R. Ayrton, to express in the same book an opinion differing from that of his Maecenas, if he held it. Mr. Weigall, however, was free to say what he pleased, and had a right to do so because, as Inspector-General of Antiquities for Upper Egypt at the time, he had the right, if not the duty, of exercising on behalf of the Egyptian Government some sort of special supervision over the excavations in the Tombs of the Kings, on account of the special conditions prescribed by the Government, under which the right to excavate there is conceded to private individuals or societies. This peculiar and—in relation to Mr. Ayrton, a most competent archaeologist and the responsible excavator of the tomb—very delicate position enabled Mr. Weigall to form views of his own from the first with regard to the find which differed from those of Mr. Davis, whether they differed from Mr. Ayrton's or not; and naturally his views did not find expression in Mr. Davis's publication. Mr. Weigall therefore published his views in the first edition of this work, and they now reappear with additions. He gives his own explanation of the confusion of objects of Tiy and of Akhenaten in the former's tomb, which may or may not be convincing in all its details. Other views of his as to the lives of the other royal personages of this time, for instance those of Iuaa and Tuaa, whose tomb was discovered and excavated for Mr. Davis by Mr. J. E. Quibell before Ayrton discovered that of Tiy, may also be subject to modification. But Mr. Weigall knows his period well, and speaks on it with authority. Estimates of Akhenaten's character and abilities will differ according to the personal predilections of the estimator. For the heretic was an aesthete, an artist, a religionist, a pacifist, and was subject to fits; so that a writer on the *Morning Post* would not be likely to take quite the same view of him as a member of the staff of the *Manchester Guardian*. It is this personal individuality of Akhenaten that appeals to the modern world, and Mr. Weigall's book will be welcomed by many who wish to know more of the 'first individual in human history' and—'the first prig'!

H. R. HALL.

Periodical Literature

The English Historical Review, January 1923, contains the following articles:—Marsiglio of Padua, Part II, Doctrines, by Mr. C. W. Previté-Orton; Scutage in the fourteenth century, by Miss H. M. Chew; Council, Star Chamber and Privy Council under the Tudors, iii. The Privy Council, by Professor Pollard; The English bishops at the Lateran Council of 1139, by Dr. R. L. Poole; Auditors of the Foreign accounts of the Exchequer, 1310-27, by Miss D. M. Broome; Bohemian scholars and students at English Universities, 1347-1750, by Mr. R. F. Young; Two more medieval ghost stories, by Dr. H. E. D. Blakiston; Some Treasurer's accounts of Montserrat, 1672-81, by Mr. C. S. S.

Higham: Three dispatches of Prince Metternich on the origins of the war of 1870, by Mr. H. W. V. Temperley.

The Journal of the British Archaeological Association, 2nd ser., vol. 28, pt. 1, contains, in addition to a fully illustrated account of the proceedings at the meeting held at Bath, a paper by Mr. Elliston Erwood on the Premonstratensian abbey of Langley, Norfolk, with a report of excavations made there in 1921, and one by Mrs. Cope on Heraldry as a Science.

Transactions of the Royal Historical Society, fourth series, vol. 5, contains the following papers:—The embassy of William Harborne to Constantinople, 1583–8, by Mr. H. G. Rawlinson; Year Books and Plea Rolls as sources of historical information, by Mr. H. G. Richardson; The political theory of the Indian Mutiny, by Mr. F. W. Buckler; The influence of the Industrial Revolution (1760–90) on the demand for Parliamentary reform, by Miss G. Whale; Practical notes on historical research, by Sir Francis Piggott; The origin and growth of the office of Deputy-Lieutenant, by Miss G. S. Thomson; The English establishments on the Gold Coast in the second half of the eighteenth century, by Miss E. C. Martin.

The Journal of Hellenic Studies, vol. 42, pt. 2, contains the following articles:—The interpretation of Greek music, by Mr. E. Clements; Greek inscriptions from Macedonia, by Mr. M. N. Tod; Notes on the ἀπὸρρέα of Thebes, by Mr. M. Cary; A Black-figure fragment in the Dorset museum, by Mrs. Ure; The constitutive act of Demetrius' league of 303, by Mr. W. W. Tarn; Bronze work of the Geometric period and its relation to later Art, by Mr. S. Casson; Traces of the Rhapsode, by Mr. J. T. Sheppard; Notes on the sculptures of the Palazzo dei Conservatori, by Mr. B. Ashmole; Locri Epizephyrii and the Ludovisi Throne, by Mr. B. Ashmole; The East European relations of the Dimini culture, by Mr. V. G. Childe.

In the *Geographical Journal* for January 1923 is an article by Dr. Rice Holmes on the topography of Caesar's campaign against the Bellovaci, in reply to Dr. Forbes's paper in the same journal for March 1922.

The Numismatic Chronicle, 1922, pt. 3 and 4, contains the following articles:—Greek coins acquired by the British Museum in 1921, by Dr. G. F. Hill; A pre-Greek coinage in the near East?, by Mr. S. Smith; 'Victoria Imperi Romani' and some posthumous issues of Galba, by Mr. H. Mattingly; Indian coins acquired by the British Museum, by Mr. J. Allan; Anglo-Saxon acquisitions of the British Museum, by Mr. G. C. Brooke.

Miscellanea Genealogica et Heraldica, 5th series, vol. 4, pts. 11 and 12, contain the following articles:—Pedigrees of Moyle of Kent, from Bodmin, Cornwall, and of Moyle of West Twyford; Grant of arms, in lieu of his original coat, to Sir Richard Lane, 8 Feb. 1649; Births, Marriages, and Deaths gleaned from the War Office records; Some early Wills at Worcester; Genealogical Notes—Brown, Chapman, Scraggs, Crosley, Poyntz, Danvers, Fabyan, Fettiplace and Allen, Field, Huckvall, Kingeston, Long, Tracy, Wace, Walrond; Kentish Wills, genealogical extracts from sixteenth-century wills in the Consistory Court at Canterbury; Continuations of the Registers of Knightsbridge

chapel, of the Feet of Fines, divers counties, and of monumental inscriptions at Bromley, Kent; The family of Moyle of Kent: Bourne Pedigree; Will of Anthony Hilton, etc.; Wills registered in the Worcester Episcopal Registers.

The Genealogist, vol. 38, pt. 4, contains the following articles:—Alice de la Marche, countess of Gloucester and Hertford, by Mr. G. W. Watson; Pedigree of Shuttleworth of Preston, Lancaster, by Mr. R. M. Glencross; The Howard pedigree and its 'Howards Den' myth, by Mr. Walter Rye; Extracts from Poltalloch writs, by Mr. H. Campbell; A note on the origin of Malcolm (or MacCullum) of Poltalloch, by Mr. H. Campbell; The Morteysns of Marston and Tillsworth, by Dr. G. A. Moriarty; The Aspinwall and Aspinall families of Lancashire (concluded), by Mr. H. O. Aspinall; Some grants of Arms—grant of a crest to John Davis of Salop and of arms to Thomas William Fletcher of Dudley, Worc.—by Rev. W. G. D. Fletcher; Extracts from a seventeenth-century note-book, by the late Mr. K. W. Murray and Mr. A. Cochrane; Index to marriages from the *Gentleman's Magazine*, by Mr. E. A. Fry.

Man, 1922, contains the following articles of archaeological interest:—Burials of the First Dynasty in Egypt, by Professor Flinders Petrie; The Ice Age and Man, papers by Messrs. C. E. P. Brooks, J. E. Marr, H. J. E. Peake, J. Reid Moir, and S. Hazzledine Warren; Notes on the chronology of the Ice Age, by Mr. M. C. Burkitt; The Ice Age and Man in Hampshire, by Mr. L. S. Palmer; The present state of archaeological studies in Central Europe, by Mr. V. G. Childe; An early palaeolithic flint implement from West Runton, Norfolk, by Mr. J. Reid Moir; Excavation of a Long Barrow [near Talgarth] in Breconshire, by Mr. C. E. Vulliamy; Note on a Long Barrow in Wales [Llanigon, Breconshire], by Mr. C. E. Vulliamy; Stonehenge: Notes on the Midsummer Sunrise, by Mr. E. H. Stone; Remarks on Mr. Stone's paper, by Admiral Somerville, and a reply by Mr. Stone; The Red Crag flints of Foxhall, Suffolk, by Mr. S. Hazzledine Warren, and a reply by Mr. J. Reid Moir; Two East Yorkshire bone harpoons, by Mr. A. Leslie Armstrong; A note on the Teocalli of Huitzilopochtli and Thaloc, Mexico, by Mr. A. P. Maudslay; Recent archaeological discoveries in Mexico, by Mrs. Zelia Nuttall; Note on some pottery objects and on an Iberian dagger with engraved handle from Spain, by Dr. W. L. Hildburgh.

The Library, vol. 3, no. 3, contains the following articles:—Books printed at Lyons in the sixteenth century, by Mr. A. F. Johnson; 'Printing with Figures': a note, by Mr. R. W. Chapman; The licensing of the *Mirror for Magistrates*, by Miss E. I. Tracey; Eliot's Court Press: Decorative blocks and initials, by Mr. H. R. Plomer; Thomas Heywood's *Art of Love* lost and found, by Mr. A. M. Clark.

The Mariner's Mirror, vol. 8, no. 12, contains the following articles:—The *Mayflower*, V, by Mr. J. W. Horrocks; Auxiliary oars, by Mr. R. C. Anderson; A scale model of the *Sovereign of the Seas* of 1637, by Mr. H. B. Culver; Some ballads and songs of the sea, III, by Mr. J. Leyland. Vol. 9, no. 1, contains Notes on the development of bands in the Royal Navy, by Mr. W. G. Perrin; Early ship surgeons, by Miss I. G. Powell; Fresh light on Drake, by Mr. G. Callender.

Journal of the Society of Army Historical Research, vol. 1, December 1922, special number, contains the diary of Sir James Halkett at Tangier, 1680, with an introduction and notes by Captain H. M. McCance. In vol. 1, no. 6, are the following papers:—Cavalry Drum banners, by Sir Arthur Leetham; Regimental colours, the Buffs, by Col. J. H. Leslie; The expedition against Martinique, 1762, with notes by Mr. W. Y. Baldry; The evolution of the gorget, by Capt. H. Oakes-Jones; Flogging in the Army, by Sir C. H. Firth; Eighteenth-century notices of uniform, by Rev. P. Sumner; The 'Government' or 'Black Watch' Tartan, by Col. the Hon. M. C. A. Drummond; British war medals which have been awarded to women, by Col. Leslie.

Proceedings of the Prehistoric Society of East Anglia, vol. 3, part 4, contains the following papers:—Prehistoric cooking-places in Norfolk, by Miss N. F. Layard; A flint factory at Thatcham, Berks., by Messrs. Harold Peake and O. G. S. Crawford; Scaper-core industries in North Wilts., by Rev. H. G. O. Kendall; Yorkshire gravers, by Mr. F. Buckley; Further discoveries of engraved flint crust and associated implements at Grime's Graves, by Mr. Leslie Armstrong; On a series of ancient 'floors' in a small valley near Ipswich, by Mr. J. Reid Moir; A visit to Crete, by Mr. M. C. Burkitt; On some flint implements beneath Blown Sand in northern France, by Mr. R. H. Chandler; The Mesvinian industry of Clacton-on-Sea, Essex, by Mr. S. Hazzledine Warren; The discovery of an early palaeolithic implement in Yorkshire, by Major E. R. Collins.

Transactions of the Essex Archaeological Society, new series, vol. 16, part 3, contains the following papers:—The decorative ornamentation on Essex Elizabethan communion cups, by Rev. W. J. Pressey; Norse Place-names in Essex, by Dr. J. H. Round; The Hornchurch road, by Dr. Round; Utlesford Hundred, East and West, by Mr. R. C. Fowler; Edward the Confessor and the church of Clavering, by Mr. V. H. Galbraith; The excavations of foundations on the castle-keep at Pleshey, by Mr. Miller Christy; An Essex brass—William Mordaunt and sons, 1518, at Hempstead—by Messrs. Christy and Porteous. Among the archaeological notes are the following:—Church goods, records of vestments in wills and inventories; Wall-painting in Little Baddow church; St. Aylet (St. Aylott's, Saffron Walden); An earth-work at Mile End, near Colchester; The recovery of the Pattiswick communion cup and cover; St. John's Abbey cartulary and the Leger book of the abbey acquired for Colchester; Tiptofts and Broadoaks in Wimbish; Seal and arms of Thremhall Priory; Danegris, the identification of the place-name; An early reservation of sporting rights, 1482.

The Essex Review, January 1923, contains the following articles:—The Harvest horn in Essex, by W. Miller Christy; Prize-fighting in Epping Forest, by Mr. W. C. Reedy; South Ockendon clergy, 1640-60, by Rev. H. Smith; The evolution of the grandfather clock, by Mr. J. French; Epping Fairs, Markets, Alehouses, by Mr. C. B. Sworder. Among the notes are the following: Supplementary list of clergy in the Harlow Deanery; The identification of Bondelay; An intruded minister at Dengie; Domestic woodwork at Saffron Walden; Wall-

painting at Newport; Seal for the new Archdeaconry of Southend; Roman mosaic pavement at Colchester.

Papers and Proceedings of the Hampshire Field Club, vol. 9, part 2, contains the following articles:—The history of the drainage of the Hampshire basin and the relation of prehistoric man to that history, by Mr. R. W. Hooley; The antiquity of man in Hampshire, by Messrs. O. G. S. Crawford, J. R. Ellaway, and G. W. Willis; Excavations in three barrows at Houndwood, by Mr. O. G. S. Crawford; Excavations in a barrow at Racombe, Isle of Wight, by Mr. O. G. S. Crawford; On Roman buildings and other antiquities in a district of north-west Hants, by Rev. G. H. Engleheart; A cross base at Winchester of a date a little before the Norman Conquest, by Sir Charles Close and Mr. W. G. Collingwood; On place-names in general and the Hampshire place-names in particular, by Dr. G. B. Grundy; Hampshire perambulations, i, by Messrs. Herbert Chitty and O. G. S. Crawford; An unrecorded brass in Winchester Cathedral, by Mr. A. Smith; 'The Mistletoe Bough'—a suggestion that Marwell Hall was the seat of the legend, by Mr. Courthope Forman.

Transactions of the Woolhope Naturalists' Field Club, volume for 1918, 19, and 21, contains the following papers of archaeological interest:—The possessions of S. Guthlac's Priory, Hereford, by Canon Bannister; The Crosse, Leominster, by Mr. T. Neild; A Norman tympanum at Fownhope, and others in Herefordshire, by Mr. G. Marshall; The Hospital of St. Katherine at Ledbury, by Canon Bannister; The roof of the Vicars' Cloister at Hereford, by Mr. G. Marshall; The College of Vicars Choral in Hereford Cathedral, by Canon Bannister; Points of interest in the vicinity of the site of the ancient castle of Hereford, by Mr. A. T. Lamont; Llanigon place-names, by Rev. W. E. T. Morgan; The Romano-British town of Magna (Kenchester), Herefordshire: Supplemental Report, by Messrs. G. H. Jack and A. G. K. Hayter; Park Hall, Bitterley, by Prebendary Burton; 'Titterstone' and 'The Clees', by Mr. J. G. Wood; The Court Rolls of Burton, in the parish of Eardisland, co. Hereford, by Canon Bannister; Notes on Bromyard Church, by Mr. W. E. H. Clarke; Hereford City Walls, by Mr. A. Watkins; Three early timber halls in the City of Hereford, by Mr. A. Watkins; 'Roaring Meg', a mortar of 1646, in Hereford, by Mr. A. Watkins; The brook called Eign, by Mr. A. Watkins; Wooden monumental effigies in Herefordshire, by Mr. G. Marshall; 'Scotland' and the 'Arthur Stone' at Dorston, by Mr. J. G. Wood; The Bishop and the Hospitallers in Garway, by Canon Bannister; Garway Church, by Mr. A. Watkins; Ross Parish Church, by Prebendary Money-Kyrle; An outline of John Kyrle, popularly styled 'The Man of Ross', by Mr. W. C. Blake; Brampton Bryan Castle, by Mr. R. H. George; Bravonium (Leintwardine), by Mr. G. H. Jack; The church of Leintwardine, by Mr. G. Marshall; All Saints' Church, Hereford, by Mr. W. E. H. Clarke; The Blackfriars and the Coningsby Hospital, Hereford, by Mr. G. Marshall; The King's Ditch of the City of Hereford, by Mr. A. Watkins.

Transactions of the Thoroton Society, vol. 25, contains the following papers:—Manuscripts of the Collegiate Church of the Blessed Mary

the Virgin of Southwell, transcribed by Mr. W. A. James; St. Wilfrid's Church, Wilford, by Mr. H. Gill; George Green, mathematician, by Miss E. M. Becket; Booth's Chapel, Southwell, by Mr. S. Race; The manor of Dunham-on-Trent, by Rev. Howard Chadwick.

Archaeologia Aeliana, 3rd series, vol. 19, contains the following articles:—The Company of Saddlers of Newcastle, by Mr. J. C. Hodgson; Notes on old glass in St. John's Church, Newcastle-upon-Tyne, by Messrs. R. J. S. Bertram, A. Hamilton Thompson, and C. H. Hunter Blair; The Lordship, the Manor, and the Township of Beanley, by Mr. J. C. Hodgson; The Hospital of St. Lazarus and the manor of Harehope, by Mr. J. C. Hodgson; The armorial evidence for the descent of Roger Thornton and of his wife Agnes, by Mr. C. H. Hunter Blair; Benwell Tower, Newcastle, by Mr. W. H. Knowles; Some points in the architectural history of Tynemouth Priory Church, by Mr. C. C. Hodges; The Black Dyke in Northumberland: an account of the earthwork, by Mr. G. R. B. Spain; The seals of Newcastle-upon-Tyne, by Mr. C. H. Hunter Blair; On an altar dedicated to the *Alaisiagae*, by Messrs. R. C. Bosanquet, T. Siebs, and W. E. Collinson; A newly discovered centurial stone at Housesteads, by Mr. R. C. Bosanquet; Deeds formerly in St. Andrew's vestry, Newcastle, by Mr. A. M. Oliver; On a Minute book and papers formerly belonging to the Mercers' Company, and 'Ordinary' of the Goldsmiths' Company, both of Durham city, by Mr. A. Hamilton Thompson.

The Wiltshire Archaeological and Natural History Magazine, vol. 42, December 1922, contains the following articles:—Midhill Chapel and Manor, by Mr. John Sadler; King's Bowood Park [no. 3], by the Earl of Kerry; Notes on Field work in N. Wilts., by Mr. A. D. Passmore; Notes on Field work round Avebury, December 1921, by Mr. O. G. S. Crawford; The destruction of the ancient screen at Hullavington, by Canon Manley. Amongst the Notes are the following: Brooches from Cold Kitchen Hill; Late Bronze Age gold bracelet from Clench common; The eastward end of Wansdyke; Broad Chalke earthworks; The Dew Pond makers of Imber; The Bradenstoke Virgin.

The Yorkshire Archaeological Journal, vol. 27, part 1, contains a paper by Mr. Paley Baildon on the Keighley family, and a note by Canon Fowler on the origin of the name of Fountains Abbey.

Proceedings of the Society of Antiquaries of Scotland, vol. 56, contains the following articles:—An earthenware pot in a grave at Dunbar, and three short cists discovered on the golf-course there, by Mr. J. G. Callander; Cup-marked stones in Strathay, Perthshire, by Mr. J. H. Dixon; Notes on the discovery of a rock-sculpture at Gallows Outon, Whithorn, by Rev. R. S. G. Anderson; Two trials for witchcraft, by Miss M. A. Murray; A short cist found at Camelon, Falkirk, by Mr. M. Buchanan; A cross-slab at St. John's Chapel, Canisbay, Caithness, by Mr. J. Nicholson; A rune-inscribed stone from Birsay, Orkney, by Mr. H. Marwick; The Monypenny Breviary, by Mr. A. Van de Put, with a note on its liturgical use, by Mr. F. C. Eeles; Ancient sculpturings in Tiree, by Mr. L. MacL. Mann; Excavation of a cairn and of the remains of four other cairns in the parish of

Muirkirk, Ayrshire, and the discovery of a deposit of burnt human bones at Borland, Old Cumnock, Ayrshire, by Mr. A. Fairbairn; The architectural history of Huntly Castle, by Mr. W. D. Simpson; A remarkable stone implement resembling a knife found at Caisteal nan Gilleann, Oronsay, by Mr. S. Grieve; the brooch of Mousa: a survey by H.M. Office of Works, by Mr. J. W. Paterson; Some Roxburgh grave-slabs and a coped stone at Ancrum, by Mr. J. H. Craw; The excavations on Traprain Law during the summer of 1921, by Messrs. J. E. Cree and A. O. Curle; Observations on the pre-Neolithic industries of Scotland, by the Abbé Breuil; Ancient wooden trap from the Moss of Auquharney, Aberdeenshire, by Prof. R. W. Reid; Ptolemaic Scotland: some new suggestions based on recent research, by Mr. I. A. Richmond; Observations regarding the use of armorial bearings by the native families of Orkney, by Capt. H. L. N. Traill; A hoard of coins found in Linlithgowshire, by Dr. G. Macdonald; The accounts of St. Salvator's College, St. Andrews, comprising the ordinary revenue and expenditure, the casual and contingent profits, &c. from 1679 to 1689, and details of the revenue in 1691, by Dr. D. Hay Fleming; Three Bronze Age hoards recently added to the National Collection, with notes on the hoard from Duddingston Loch, by Mr. J. G. Callander; A food-vessel urn from Oban, by Mr. J. G. Callander.

The Scottish Historical Review, January 1923, contains the following articles:—The Regalia of Scotland, 1651–60, by Dr. Walter Seton; General Council and Convention of Estates, by Prof. R. K. Hannay; *The Defiance at Trafalgar*, a letter written after the battle by Admiral Colin Campbell, with an introduction by Dr. D. B. Smith; The Vice-Admiral of Scotland and the quest of the 'golden pennie', by Sir Bruce Seton; The office of sheriff in Scotland: its origin and early development, by Mr. C. A. Malcolm.

Archaeologia Cambrensis, vol. 77, part 2, contains the following papers:—The locality of the battle of Mynydd Carn, A.D. 1081, presidential address by Sir Evan Jones; Notes on some of the early Welsh inscriptions, by Prof. R. A. S. Macalister; The Welsh woollen industry in the sixteenth and seventeenth centuries, by Miss Caroline Skeel; The Segontium excavations, 1922, by Dr. R. E. M. Wheeler; Haverfordwest Priory: report on the excavations of June 1922, by Mr. A. W. Clapham; The Romano-British site at Rhostryfan, Carnarvonshire, by Mr. Howel Williams; Prehistoric remains on Penmaenmawr (known as Braich y Dinas): fourth report on the survey and excavations, by Mr. Harold Hughes; St. David's Cathedral, by Mr. E. W. Lovegrove; The Town seal of Haverfordwest, by Mr. W. J. Hemp. The number also contains a fully illustrated report of the Annual Meeting held at Haverfordwest in August 1922.

The Bulletin of the Board of Celtic Studies (University of Wales), vol. 1, part 3, contains, in addition to literary articles:—The account roll of the Principality of North Wales from Michaelmas 1304 to Michaelmas 1305, edited by Mr. E. A. Lewis, and notes on current Welsh archaeology, contributed by Dr. Mortimer Wheeler.

Académie des Inscriptions et Belles-Lettres: Comptes rendus, July–

August, September–October, 1922, contain the following articles:—The Gospel-book of the Empress Catherine Comnenus, by M. C. Diehl; Further excavations in the Gallo-Roman cemeteries at Mantes-de-Veyre, by M. A. Audollent; The meaning of the word *nepos* in two Latin inscriptions from Britain, by M. J. Loth; Constantine and the torch-bearer (*δαδούχος*) of Eleusis, by M. J. Baillet; Excavations on the site of a basilica near Douar-Ech-Chott, Carthage, by R. P. Delattre; Pascal Fourcade, the explorer of Asia Minor, by M. F. Cumont; A foundation of the time of Ptolemy Epiphanes: the temple of the Lion-god at Leontopolis, by M. P. Perdrizet; Excavations at Bulla Regia in 1922, by Dr. L. Carton; Report on the archaeological work of the Syrian Service of Antiquities and on the foundation of the French School of Archaeology at Jerusalem, by M. E. Pottier; Report on the work of the Egyptian Service of Antiquities, by M. P. Lacau; The discovery of a group of Christian buildings at Djemila, by M. P. Monceaux.

Bulletin monumental, vol. 81, part 3 and 4, contains the following articles:—Naves without clearstory windows in Romanesque and Gothic churches, by M. E. Lefèvre-Pontalis; French bell turrets, concluded, by M. R. Fage; The abbey of Massay (Cher), by MM. Deshoulières and Gauchery; The church of Gourdon (Saône-et-Loire), by M. C. Moreux; The great hall of the Hospital of St. John at Angers, by Canon Urseau; The tympana at Saint-Bénigne, Dijon, and at Til-Châtel (Côte-d'Or), by M. P. Deschamps; Civil furniture in the Middle Ages—the table, by Lieut.-Colonel Dervien; A copy of the 'Well of Moses' at Dijon, by M. A. Perrault-Dabot; A Carolingian base in the Cluny Museum, by M. F. de Montrémy; Two Romanesque capitals from Parthenay, by M. E. Lefèvre-Pontalis; The covered cross at Villeneuve-lès-Avignon, by M. Lefèvre-Pontalis; The stalls at Nanteuil-en-Vallée, by M. Lefèvre-Pontalis; A Gothic belt buckle found in Roumania, by M. M. Aubert; The origin of the monogram of the tapestry weavers, by M. M. Jusselin.

Revue archéologique, fifth series, vol. 16, July–October, 1922, contains the following articles:—The proto-history of Southern France and the Spanish peninsula in the light of recent discoveries, by M. Léon Joulín; Nubian pottery, by Dr. E. Naville; Leonardo da Vinci's linear perspective, by M. J. Mesnil; An explanation of a Gnostic intaglio, by M. C. Bruston; Archaeology and photography, by M. W. Deonna; Kaineus and the Centaurs (note on a Greek vase in the Saint-Ferriol collection), by M. H. Boucher; The Cyclopes, by M. L. Siret; Religious ideas amongst the Lusitanians, by M. J. Leite de Vasconcellos.

Bulletin de la Société scientifique, historique et archéologique de la Corrèze, vol. 44, part 3, contains the following articles:—The commune of Chasteaux during the Revolution, by Dr. R. Laffon; A further part of the paper on Saint-Robert, by M. V. Forot; Georges Cabanis, his name and family, by M. L. de Nussac; The hospital of Brive, by M. J. Lalande.

Bulletin de la Société des Antiquaires de Picardie, 1922, no. 2 and 3, contains the following articles:—The evil of St. John Baptist (epilepsy) at Amiens in the sixteenth century, by M. O. Thorel; The embassy

of the duc de Verneuil to England in 1665, by M. A. Huguet; Discoveries in Amiens in 1920-2, recording the discovery of Roman and later remains, by M. A. Ponchon.

Bulletin historique de la Société des Antiquaires de la Morinie, vol. 13, April-October 1922, contains the following articles:—The Reform of the Grey friars at St.-Omer, 1408-9, by Canon Bled, a review of a book by Father Gratien; The will of Guillaume Fillastre, abbot of St. Bertin and bishop of Tournai, 1473, by Abbé Vansteenberghe.

Pro Alesia, no. 30 (seventh year), contains the following articles:—A bronze bust of a youth for use as an unguent vessel from Le Princier, Pont-Verdunois, and a bronze bowl from Avocourt, by M. G. Chenet; Potters' marks from Le Châtelet, by M. R. Colson; Gallo-Roman archaeology in 1920.

Hespéris, *Bulletin de l'Institut des Hautes Études marocaines*, vol. 2, nos. 1 and 2, contain, amongst other matter, an article by MM. H. Basset and E. Lévi-Provençal on the town of Chella, and another by Dr. Ferriol on the ruins of Tinnel.

Académie royale de Belgique, *Bulletin de la classe des Lettres*, 5th series, vol. 8, no. 8, contains papers by M. P. Thomas on the death watch in antiquity, and by Dom Ursmer Berlière on Parochial processions.

Oudheidkundige mededeelingen uit 's Rijksmuseum van Oudheden te Leiden, vol. 3, part 1, contains a Transcript and translation of the Insinger Papyrus in the Rijksmuseum, by Dr. P. A. A. Boeser.

Atti e Memorie della Società Tiburtina, vol. 2, no. 3-4, contains the following articles:—Unpublished documents concerning the excavations by Pius VI at Tivoli, by Dr. R. Lanciani; The *Via Tiburtina*, by Dr. T. Ashby; The bishops of Tivoli (continued), by Sgr. G. Cascioli; The parents and family of Francesco Manelli, by Sgr. G. Radiciotti; A brief of Clement IV to Bishop Giacomo da Fossanova of Tivoli; Relations between Tivoli and Subiaco; The eighteenth-century diary of Giuseppe Gismondi; Discovery of Roman remains in the Truglia valley; Documents and seals of the bishops of Tivoli.

Mittheilungen der Antiquarischen Gesellschaft in Zürich, vol. 29, part 3, contains an article by Dr. Hermann Varnhagen on the Milan campaign in the year 1522.

Oldtiden: Tidskrift for Norsk Forhistorie, vol. x, part 1 (Kristiania, 1923).—Hoards of iron in Norway have been differently interpreted by G. F. Heiberg, who regards the items as finished tools, and by Jan Petersen, who supposes that raw material was circulated in the form of rough axe-heads, etc., which were intended to be subsequently worked up into tools or weapons. Sigurd Grieg describes at some length discoveries in several grave-mounds at Lille Guldkrønen, Vestfold, the date of one being given by a trefoil-brooch of the period 800-50. Others containing weapons are dated by reference to Jan Petersen's work on the Viking sword; but some appear to belong to the Migration period. Some were boat-burials, and there were cremated as well as unburnt burials, as was the case also at Søndre Berg in the same district; but the meagre grave-furniture renders their classification rather difficult.

Fornvännen: Meddelanden från K. Vitterhets Historie och Antikvitets Akademien, 1922, häft 4 (Stockholm).—A Gotland find dating from about 800, when Style III was blended with the grasping animal of the Carolingian renaissance, is published with illustrations by Dr. Bernhard Salin. It comprises a fine sword-handle, several belt ornaments, and an amber bridge for a musical instrument of four or six strings. The rest of the number is devoted to rock-engravings. Groups of ships are discussed by Just Bing, and the debate between Bror Schnittger and Gunnar Ekholm as to the date and meaning of the sculptures is resumed and concluded. The former holds that these Scandinavian monuments are earlier in the north than the south, and connects them with agricultural ceremonies; the latter holds the opposite view regarding their date, and connects them all with the worship of the dead. That the discussion of one group of antiquities can run to such length is evidence not only of the obscurity of the subject, but also of the vitality of Scandinavian archaeology.

The American Journal of Archaeology, vol. 26, no. 4, contains the following articles:—Sixth preliminary report on the American excavations at Sardes in Asia Minor, by Mr. T. L. Shear; Domestic costume of the Athenian woman in the fifth and fourth centuries, by Mr. A. W. Barker; A terra-cotta head in the Loeb collection, by Mr. W. W. Hyde; Studies in the history and topography of Locris, by Mr. W. A. Oldfather; A sarcophagus at Corinth, by Mr. J. D. Young; Latin inscriptions from Corinth, by Mr. L. R. Dean.

Anales del Museo nacional de Arqueología, Historia y Etnografía de Mexico, vol. 18, May-June, 1922, contains the following papers of archaeological or historical interest:—Nahoa chronology, by D. M. O. de Mendizábal; 'El Desierto de los Leones' (the foundation of the convent there in 1605), by D. F. Gómez de Orozco.

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*Histoire de l'Art depuis les premiers temps chrétiens jusqu'à nos jours: ouvrage publié sous la direction de M. André Michel. Tome vi, L'art en Europe au xviii^e siècle, seconde partie. 11 $\frac{1}{4}$ x 7 $\frac{3}{4}$. Pp. 509-947. Paris: Armand Colin. 50 francs.

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*Eight chapters on English medieval art: a study in English economics. By E. S. Prior. 7 $\frac{3}{4}$ x 5 $\frac{1}{4}$. Pp. xii + 147. Cambridge: at the University Press, 1922. 6s.

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Heraldry.

- **Manuel d'Héraldique: première initiation à l'art et à la science du blason.* By D. L. Galbreath and H. de Vevey. $6\frac{1}{2} \times 4\frac{1}{2}$. Pp. 183. Lausanne: Éditions Spes. 8 fr. 50.

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Proceedings of the Society of Antiquaries

Thursday, 11th January 1923. Sir Hercules Read, President, in the Chair.

Mr. L. H. D. Buxton was admitted a Fellow.

Votes of thanks were passed to the editors of *The Builder*, *Notes and Queries*, *The Nation and Athenaeum*, and *The Indian Antiquary*, for the gift of their publications during the past year.

The President drew attention to the proposed new Antiquities law for Egypt and moved the following resolution, which was carried unanimously and ordered to be forwarded to the Director of the Service of Antiquities at Cairo :—

‘The Society of Antiquaries of London has heard with much regret that the Egyptian Government proposes to make a change in the Antiquities law which will deprive excavators of any share in the objects found in their explorations.

‘The old law under which explorers received one-half of the proceeds of their excavations, while the rest, with the addition of any articles of exceptional rarity, were reserved for the Museum in Cairo, has worked well in the past. The liberal spirit in which it was conceived has greatly enriched the Museum in Cairo, at no cost to the country, while the representatives of foreign museums have been able to secure ample funds for digging, knowing well that it was practically certain that such outlay would be repaid by their share of the antiquities found.

‘If this reasonable and even generous plan be changed, by depriving the excavators of any share of their finds, it is self-evident that no museums will undertake any research of this kind, while the numbers of private explorers will be greatly diminished. The loss to the country in money alone will evidently be a very serious matter. The damage to ancient sites will undoubtedly be very grave, as plundering by unauthorized persons will become a common practice, and objects of the greatest historical interest will be rendered almost valueless. Finally, the Museum in Cairo will be deprived of a continuous stream of accessions flowing in without cost, and will be morally compelled to spend large sums in exploration on its own account.

‘For these reasons alone, the Society of Antiquaries would invite the Egyptian Government to give further consideration to the matter before deciding to make so drastic and disastrous a change in the law.’

Mr. A. E. Henderson, F.S.A., exhibited drawings and sketches by himself of Spanish churches.

The following were elected Fellows of the Society :—Mr. Walter George Bell; Mr. Francis Hermitage Day; Mr. John Laurence Lambe; Mr. William Henry Clement Le Hardy; Mr. Harold Sydney Rogers; Major Frederick William Slingsby; Mr. Arthur Thomas Winn; Mr. Edwin Beresford Chancellor; Rev. Charles Moor, D.D.; Mr. William Maurice Wright; Mr. Edward Herbert Stone; Mr. George Henry Palmer.

Thursday, 18th January, 1923. Mr. M. S. Giuseppi, Vice-President, in the Chair.

Mr. W. H. C. Le Hardy was admitted a Fellow.

Mr. C. L. Kingsford, Vice-President, read a paper on Essex House, formerly Exeter Inn and Leicester House, which will be printed in *Archaeologia*.

The Rector and Churchwardens of St. Mary Woolnoth exhibited through Mr. W. H. Quarrell, F.S.A., two silver gilt flagons, a silver flagon, and a communion cup and cover.

Thursday, 25th January 1923. Mr. C. L. Kingsford, Vice-President, in the Chair.

Mr. J. L. Lambe, Mr. W. M. Wright, Mr. F. H. Day, Mr. G. H. Palmer, and Rev. Dr. Moor were admitted Fellows.

On the nomination of the Vice-President in the Chair, acting as the President's Deputy, the following were appointed Auditors of the Society's accounts for the year 1922 :—Messrs. Francis William Pixley, Percival Davis Griffiths, William Longman, and Wilfrid James Hemp.

Dr. Eric Gardner, F.S.A., read a paper on a medieval tile kiln at Chertsey Abbey, with an exhibition of tiles by Mr. L. Porter, which will be printed in *Archaeologia*.

Messrs. D. W. Herdman and A. E. W. Paine exhibited through Mr. O. G. S. Crawford, F.S.A., some finds from Long Barrows in Gloucestershire.

Thursday, 1st February 1923. Rev. E. E. Dorling, Vice-President, in the Chair.

The Chairman referred to the death of Lord Northbourne and moved the following resolution, which was carried unanimously, the Fellows signifying their assent by rising in their places :—

'The Society of Antiquaries of London desires to record its sense of the serious loss Archaeology has sustained by the death of Lord Northbourne, for more than twenty years a Fellow of the Society and President of the Kent Archaeological Society. His many services to the cause of our native antiquities and his most generous support of the excavation work at St. Augustine's Abbey, Canterbury, will long be remembered. He was always forward in assisting and extending the activities of this Society in his own counties and elsewhere, as well as in helping local efforts in every way. The Society tenders its respectful sympathy to Lady Northbourne and her family in their great loss.'

The President exhibited some panels of medieval stained glass.

The Treasurer exhibited and presented a circular illuminated pedigree of the family of Broughton of Shropshire.

Mr. Mill Stephenson, F.S.A., exhibited five shields of arms from monumental brasses.

The following were elected Fellows of the Society :—Mr. Sidney Joseph Madge; Mr. George Percy Churchill; Mr. George Eric Chambers; Mr. George William Haswell; Mr. Leonard Morgan May; Mr. William Fowler Carter; Mr. Ernest Alexander Rahles Rahbula; Mr. Arthur Lee Humphreys; Dr. Cyril Fred Fox; Mr. Miles Crawford

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Burkitt; Mr. Geoffrey Arthur Romaine Callender; and Canon Charles Frederic Roberts.

Thursday, 8th February 1923. Mr. W. Paley Baildon, Vice-President, in the Chair.

The following were admitted Fellows:—Messrs. G. W. Haswell, M. C. Burkitt, G. E. Chambers, G. A. R. Callender, A. L. Humphreys, E. A. R. Rahbula, and S. J. Madge.

Professor E. S. Forster, F.S.A., read a paper on a bronze head of Athena from Burleigh Court, Stroud, which will be published in *Archaeologia*.

Mr. H. Clifford Smith, F.S.A., exhibited a bronze figure of Christ from a crucifix, English work of the fourteenth century, and eight fifteenth-century painted panels from the rood screen of Nayland Church, Suffolk, which will be published in the *Antiquaries Journal*.

Thursday, 15th February 1923. Mr. M. S. Giuseppi, Vice-President, in the Chair.

Dr. C. F. Fox and Mr. L. M. May were admitted Fellows.

A letter was read from Lady Northbourne thanking the Society for its expression of sympathy with her and her family in their bereavement.

Mr. W. Parker Brewis, F.S.A., read a paper on the bronze sword in Britain, which will be published in *Archaeologia*.

Thursday, 22nd February 1923. Mr. C. L. Kingsford, Vice-President, in the Chair.

The following were admitted Fellows:—Mr. P. W. L. Adams, Mr. W. Bell Jones, and Mr. W. F. Carter.

Messrs. John Humphreys, F.S.A., J. W. Ryland, F.S.A., F. C. Wellstood, F.S.A., Local Secretaries for Warwickshire, and Mr. E. A. B. Barnard, F.S.A., Local Secretary for Worcestershire, read a further report on the discoveries made in an Anglo-Saxon burial ground at Bidford-on-Avon, Warwickshire, in 1922, which will be printed in *Archaeologia*.

Thursday, 1st March 1923. Rev. E. E. Dorling, Vice-President, in the Chair.

Mr. G. P. Churchill was admitted a Fellow.

The President exhibited some further panels of medieval stained glass.

Mr. G. Harry Wallis, F.S.A., exhibited an illuminated pedigree of Sir Henry Grey of Pyrgo, descended from the Greys of Ruthin, attested by William Dethick, Garter in 1601; and a bronze mortar of the sixteenth century found on the site of Thurgarton Priory, Notts., in 1840.

Dr. W. L. Hildburgh, F.S.A., exhibited six English alabaster tables.

Rev. Dr. Moor, F.S.A., exhibited the thirteenth-century silver matrix of the seal of the Dean and Chapter of Chichester Cathedral.

Mr. W. Wyatt-Paine, F.S.A., exhibited a sixteenth-century bronze bust of Minerva.

The following were elected Fellows of the Society:—Mr. William Edwards Miller; Mr. John Mackworth Wood; Mr. Rees Price; Mr. George Alfred Garfitt; Rev. John Thomas Evans; Mr. Thomas Davies Pryce; Mr. Ernest Woolley; Rev. Jocelyn Henry Temple Perkins; Canon Richard Albert Thomas; Rev. Gerald Montagu Benton; Mr. Frederick James Edward Raby.

Thursday, 8th March 1923. Mr. W. Paley Baildon, Vice-President, in the Chair.

Messrs. W. E. Miller, Rees Price, G. F. Farnham, F. J. E. Raby, and E. Woolley were admitted Fellows.

Mr. V. B. Redstone, F.S.A., read a paper on the fifteenth-century jail of the Liberty of St. Etheldreda at Melton-by-Woodbridge, Suffolk.

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